REGULATIONS AND CURRICULUM GOVERNING

BAMS PROGRAM

(2021-2022)

YENEPOYA AYURVEDA MEDICAL COLLEGE & HOSPITAL



YENEPOYA
(DEEMED TO BE UNIVERSITY)

Deralakatte, Mangalore, Karnataka.

NOTIFICATION FROM THE UNIVERSITY

YENEPOYA
(DEEMED TO BE UNIVERSITY)
Recognized under Sec 3(A) of the UGC Act 1956
Accredited by NAAC with 'A' Grade

Office of the Registrar
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Ref: No. Y/REG/ACA/BAMS/2022 07.05.2022

The Principal
Yenepoya Ayurveda Medical College & Hospital

Sub: Revised syllabus of 1st year BAMS programme from the academic year 2021-2022

Ref: Your email dated 30th April 2022

****

The proposal of revised syllabus of BAMS programme as per the National Commission for Indian System of Medicine (NCISM) from the academic year 2021-2022 is approved by the Vice Chancellor in terms of Bye Law YU 438 A.

REGISTRAR
mj

Copy to:

1. File copy – **{to place the matter before the Academic Council at its next meeting for ratification }**

YENEPOYA

OFFICE OF THE REGISTRAR

No.: 54-ACM/18/2023

Date: 01.01.2024

NOTIFICATION

Sub: Revision in the syllabus of 2nd year BAMS programme – reg.:-

Ref: 1. Resolution of the Academic Council at its 54th meeting held on 20.11.2023 vide agenda18.

2. Resolution of the Executive Council at its 1st meeting held on 21.12.2023 vide agenda-05.

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Pursuant to the resolutions cited in the above references, the Yenepoya (Deemed to be University) hereby notifies the revision of syllabus of 2nd year BAMS programme as per the NCISM guideline under the Faculty of Ayurveda.

The revised syllabus shall be applicable to the students admitted for the program from the academic year 2023-2024.

REGISTRAR

mj

To:

PA to Vice Chancellor
Dean of Academics, Yenepoya (Deemed to be University)
Controller of Examination
Dean, Faculty of Ayurveda
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YENEPOYA (DEEMED TO BE UNIVERSITY)

OFFICE OF THE REGISTRAR

No.: 63-ACM/08/2025
Date: 16.06.2025

NOTIFICATION

Sub: Curriculum approval of third Professional BAMS - reg.:-

Ref: 1. Resolution of the Academic Council at its 63rd meeting held on 13.05.2025 vide agenda-08.
2. Resolution of the Executive Council at its 8th meeting held on 10.06.2025 vide agenda - 3

*****

Pursuant to the resolutions cited in the above references, Yenepoya (Deemed to be University) hereby notifies the curriculum for the third Professional BAMS program as per the National Commission for Indian System of Medicine applicable from the academic year 2025-2026.

REGISTRAR
mj

To:

PA to Vice Chancellor
Dean of Academics, Yenepoya (Deemed to be University)
Controller of Examinations
Dean, Faculty of Ayurveda
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YENEPOYA
(DEEMED TO BE UNIVERSITY)

CONTENTS

S. No.	Particulars	Page numbers
1.	**Preamble**	**05**
2.	**Eligibility for Admission**	**07**
3.	**Program Outcomes**	**10**
4.	**Duration of the Program**	**11**
5.	**Degree to be Awarded**	**11**
6.	**Medium of Instruction**	**11**
7.	**Pattern of Study**	**12**
8.	**Scheme of Examination**	**17**
9.	**Assessment**	**20**
10.	**Migration**	**22**
11.	**Internship**	**23**
12.	**AyurPraveshika (Transitional Curriculum)**	**27**
13.	**Syllabus & Activity Record**	**44-2838**
	First Professional BAMS: a. Samskritam Evam Ayurveda Ithihasa b. Padartha Vijnana c. Kriya Sharira d. Rachana Sharira **e.** Samhita Adhyayan I	**44-360**
	Second Professional BAMS: a. Dravyaguna Vigyan b. Rasashastra evam Bhaishajyakalpana c. Roga Nidan evam Vikriti Vigyan d. Agad Tantra evam Vidhi Vaidyaka e. Samhita Adhyayan-2 **f.** Swasthavritta evam Yoga	**361-1369**
	Third Professional BAMS: a. Kayachikitsa including Manasa Roga, Rasayana and Vajikarana b. Panchakarma & Upakarma c. Shalya Tantra d. Shalakya Tantra e. Prasuti Tantra evam Stree Roga f. Kaumarabhritya g. Samhita Adhyayan-3 h. Atyaikachikitsa **i.** Research Methodology and Medical-statistics	**1370-2825**
14.	**Shishiksha (Internship orientation Program)**	**2826**

PREAMBLE

Ayurveda is a comprehensive system of medicine that emphasizes a healthy lifestyle and the principles of preventive and curative healthcare. It views health as a harmonious balance of physical, mental, social, emotional, spiritual, and economic well-being. Rooted in an integrated understanding of the human, plant, and animal kingdoms and their interaction within the ecosystem, Ayurveda promotes holistic living and sustainable health practices.

The philosophy of Ayurveda is deeply aligned with the four fundamental aims of life, known as the *Purusharthas—Dharma* (ethical conduct), *Artha* (prosperity), *Kaama* (fulfillment of desires), and *Moksha* (liberation). The attainment of these goals is possible only when an individual enjoys good health and longevity. Thus, Ayurveda extends beyond the treatment of diseases to the cultivation of a strong body, sound mind, and balanced life, earning its recognition as the "Science of Life."

To systematically address health and disease, Ayurveda is classified into eight specialized branches collectively known as *Ashtanga Ayurveda*: *Kaya Chikitsa* (Internal Medicine), *Shalakya Tantra* (ENT and Ophthalmology), *Shalya Tantra* (Surgery), *Agadatantra evum Vidhi Vaidyak* (Toxicology and Jurisprudence), *Bhoota Vidya* (Psychology and Metaphysics), *Kaumara Bhritya* (Paediatrics), *Rasayana* (Rejuvenation Therapy), and *Vajeekarana* (Reproductive Health and Vitality).

The Bachelor of Ayurvedic Medicine and Surgery (B.A.M.S.) program at Yenepoya (Deemed to be University) is designed to impart in-depth theoretical knowledge and extensive practical training across these eight branches. The curriculum integrates the fundamental principles of Ayurveda, human anatomy and physiology, pathology, pharmacology, pharmaceutics, therapeutics, preventive medicine, Panchakarma, and clinical practice. Subjects such as *Samhita Adhyayana*, *Rachana Sharir*, *Kriya Sharir*, *Roga Nidana*, *Dravya Guna*, *Rasa Shastra*, *Panchakarma*, and *Swastha Vritta* are structured to develop competent physicians capable of disease prevention, diagnosis, and holistic treatment.

To educate a diverse community of students and advance the Ayurvedic system of medicine through excellence in education, research, and clinical practice, fostering professionals who positively impact individual and global health.

The institution is guided by commitments to excellence, humanism, social responsibility, and professionalism, emphasizing compassion, integrity, social justice, teamwork, and lifelong learning.

ELIGIBILITY FOR ADMISSION

The eligibility to seek admission in Bachelor of Ayurveda education shall be as under;

I. The candidate shall have passed 10+2 or its equivalent examination from any recognized Board with Physics, Chemistry, Biology and have obtained minimum of fifty per cent. marks taken together in Physics, Chemistry and Biology in the case of general category and forty per cent. marks in the case of the Scheduled Castes, Scheduled Tribes and Other Backward Classes: Provided that in respect of persons with disability candidate specified under the Rights of Persons with Disabilities Act, 2016 (49 of 2016), the minimum qualifying marks in the said examinations shall be forty-five per cent. in the case of General category and forty per cent. in the case of the Scheduled Castes, Scheduled Tribes and Other Backward Classes.

II. No candidate shall be admitted to B.A.M.S Degree program unless the candidate attained the age of seventeen years on or before the 31st December of the year of admission in the first year of the program and not more than twenty-five years on the 31st December of the year of admission in the first year of the program: Provided that, the upper age-limit may be relaxed by five years in the case of Scheduled Castes, Scheduled Tribes, Other Backward Classes and disabled candidates.

III. **National Eligibility-cum-Entrance Test**.-

a. There shall be a uniform entrance examination for all medical institutions at the under-graduate level, namely the National Eligibility-cum- Entrance Test (NEET) for admission to under-graduate program in each academic year and shall be conducted by an authority designated by the National Commission for Indian System of Medicine.

b. In order to consider for admission to under-graduate program for an academic year, it shall be necessary for a candidate to obtain minimum of marks at 50th percentile in the National Eligibility-cum- Entrance Test for under-graduate program held for the said academic year:

Provided that in respect of;

(i) candidates belonging to the Scheduled Castes, Scheduled Tribes and Other Backward Classes, the minimum marks shall at 40th percentile;

(ii) candidates with specified disabilities under the Rights of Persons with Disabilities Act, 2016 (49 of 2016) the minimum marks shall be at 45th percentile in the case of general category and 40th percentile in the case of the Scheduled Castes, Scheduled Tribes and Other Backward Classes:

Provided further that where sufficient number of candidates in the respective category fail to secure minimum marks in the National Eligibility - cum - Entrance Test held for any academic year for admission to undergraduate program, the National Commission for Indian System of Medicine in consultation with the Central Government may at its discretion lower the minimum marks required for admission to undergraduate program for candidates belonging to respective category and marks so lowered by the Central Government shall be applicable for that academic year only.

IV. An All-India common merit list as well as State-wise merit list of the eligible candidates shall be prepared on the basis of the marks obtained in the National Eligibility-cum-Entrance Test and the candidates, within the respective category shall be considered for admission to under-graduate program from the said merit lists only.

V. The seat matrix for admission in the Government, Government-aided Institution and Private Institution shall be fifteen per cent. for All-India Quota and eighty-five per cent. for the State and Union territory quota:

Provided that;

(i) the All-India Quota for the purpose of admission in all the deemed university both Government and private shall be hundred per cent.;

(ii) the university and institute which are already having more than fifteen per cent. All-India Quota seats shall continue to maintain that quota;

(iii) five per cent. of the annual sanctioned intake capacity in Government and Government-aided Institution shall be filled up by candidate with specified disability in accordance with the provisions of the Rights of Persons with Disabilities Act, 2016 (49 of 2016) and based on the merit list of National Eligibility -cum-Entrance Test.

VI. (i) The designated authority for counseling of State and Union territory quota for admissions to undergraduate program in all Ayurveda Educational Institutions in

the States and Union territories including institutions established by the State Government, University, Trust, Society, Minority Institution, Corporation or Company shall be the respective State or Union Territory in accordance with the relevant rules and regulations of the concerned State or Union territory, as the case may be. (ii) The counseling for all admission to Bachelor of Ayurvedic Medicine and Surgery Program for hundred percent seats of all Deemed Universities both Government and Private shall be conducted by the authority designated by the Central Government in this behalf.

VII. The counselling for admission to Bachelor of Ayurvedic Medicine and Surgery Program for seat under All-India Quota as well as for all Ayurveda Educational Institutions established by the Central Government shall be conducted by the authority designated by the Central Government in this behalf.

VIII. (i) All seats irrespective of category (Central quota, State Quota or management etc.) except foreign nationals are to be admitted through counselling (Central, State or UT) only. Direct admission by any means other than above specified shall not be approved. (ii) The institutions shall have to submit the list of students admitted in the format specified by NCISM on or before 6 pm on the cutoff date for admissions specified by NCISM time to time for verification. (iii) Universities shall approve the admission of those candidates (except foreign nationals) who have been allotted through counselling (Central, State or UT as the case may be)

IX. No candidate who has failed to obtain the minimum eligibility marks under this regulation shall be admitted to under-graduate program in the said academic year.

X. No authority or institution shall admit any candidate to the under-graduate program in contravention of the criteria or procedure laid down in these regulations in respect of admission and any admission made in contravention of the said criteria or procedure shall be cancelled by the National Commission for Indian System of Medicine forthwith.

XI. The authority or institution which grants admission to any student in contravention of the criteria or procedure laid down in these regulations shall be liable accordingly, under the relevant provisions of the Act.

XII. For foreign national candidate, any other equivalent qualification approved by the Central Government may be allowed and sub-regulation (2) of regulation 5 shall not be applicable.

PROGRAM LEARNING OUTCOMES (PO)

At the end of the BAMS program, the students will be able to:

Program Learning Outcomes	
PO1	Demonstrate comprehensive knowledge and application of the Trisutra concept to explore root causes, identify clinical manifestations of disease to treat ailments and maintain healthy status
PO2	Demonstrate knowledge and skills in Ayurveda, acquired through integration of multidisciplinary perspectives and keen observation of clinical and practical experiences.
PO3	Demonstrate proficiency in holistic, unique assessment of an individual for rational approach and decision-making in management of disease and maintenance of health.
PO4	Perform procedures and therapeutic maneuvers with skill and dexterity in a variety of situations.
PO5	Demonstrate knowledge, skills and attitudes to provide holistic quality care and preparedness to practice.
PO6	Demonstrate agility, virtuous and ethical behavior and compassion to improve the well-being of individuals and society.
PO7	Demonstrate self-directedness in pursuit of knowledge and skills, which is required for advancing health care and wellbeing of society.
PO8	Demonstrate the ability to effectively communicate with patients, families, community and peers
PO9	Demonstrate an understanding of qualities and required skills as a practitioner, researcher and academician and an aspiration to become one.

DURATION OF THE PROGRAM

The duration of the B.A.M.S. Program shall be five years and six months as per the following table, namely:

Sl. No	Course of the BAMS Program	Duration
A	First Professional B.A.M.S.	Eighteen Months
B	Second Professional B.A.M.S	Eighteen Months
C	Third (Final) Professional B.A.M.S.	Eighteen Months
D	Compulsory Rotatory Internship	Twelve Months

DEGREE TO BE AWARDED

The candidate shall be awarded **Ayurvedacharya** (Bachelor of Ayurvedic Medicine and Surgery-B.A.M.S) Degree after passing all the examinations and completion of the laid down program of study extending over the laid down period and the compulsory rotatory internship extending over twelve months and the nomenclature of degree shall be Ayurvedacharya (Bachelor of Ayurvedic Medicine and Surgery -B.A.M.S).

MEDIUM OF INSTRUCTION

The medium of instruction for the program shall be Sanskrit or Hindi or any recognized regional language or English.

Provided that in case, if any institute is admitting students from different states or international students, the medium of instruction shall be English.

PATTERN OF STUDY

The B.A.M.S. Program shall consist of Main Program and Electives and the pattern of study shall be followed in the following manner;

A. (a) After admission, the student shall be inducted to the B.A.M.S. Program through an Induction Program not less than fifteen working days based on the Transitional Curriculum which intends to introduce newly admitted student to Ayurveda system of medicine and to make him well aware of the B.A.M.S. Program he is going to study for next four and a half years. (b) During the induction program, the student of Ayurveda shall learn basic of Sanskrit for Ayurveda and basic life support and first aid along with another subject as laid down in the syllabus. (c) There shall be fifteen days induction program which shall be not less than ninety hours and every day may consist of six hours.

B. Total working days for each professional session shall be not less than three hundred and twenty days.

   a. (a) Total working days for the First Professional session shall be not less than three hundred and five days except for fifteen days for the induction program. (b) total teaching hours for First Professional session shall not be less than 1920.

   b. Total teaching hours for Second Professional session shall be not less than 2240 and the proportion of teaching hours in Lecture to Non-lecture shall be 1:2.

   c. Total teaching hours for Third (Final) Professional session shall not be less than 2240 and during the Third (Final) Professional Session, three hours of clinical classes at Hospital during morning hours shall be conducted and the proportion of teaching hours in Lecture to Non-Lecture hour shall be 1:2.

   d. Working hours may be increased by the University or institution as per requirement to complete the stipulated period of teaching and requisite activity. Explanation.- For the purposes of this regulation the expression “Lectures” means Didactic teaching i.e., classroom teaching and the expression “Non-lectures” includes Practical / Clinical and Demonstrative teaching and the Demonstrative teaching includes Small group teaching / Tutorials /Seminars / Symposiums / Assignments / Role play / Pharmacy

training / Laboratory training / Dissection / Field visits / Skill lab training / Integrated learning / Problem based learning / Case based learning / Early clinical exposure / Evidence based learning etc. as per the requirement of the subject and in Non-lectures, the Clinical / Practical part shall be seventy per cent. and Demonstrative teaching shall be thirty per cent.

e. There shall be minimum of one hour each for library and physical education per week and one hour of recreation (expression of talent and extra-curricular activities) per month has to be allotted in the regular time table of all batches.

C. The following subjects shall be taught as per the syllabus laid down by the National Commission for Indian System of Medicine from time to time;

Subjects for First Professional B.A.M.S			
Sl. No	**Subject Code**	**Subject**	**Equivalent Term**
1	AyUG-SN and AI	Samskritam evam Ayurved Ithihas	Sanskrit and History of Ayurveda
2	AyUG-PV	PadarthaVigyan	Fundamental Principles of Ayurveda and Quantum Mechanics
3	AyUG-KS	Kriya Sharira	Human Physiology
4	AyUG-RS	Rachana Sharira	Human Anatomy
5	AyUG-SA1	Samhita Adhyayan-1	Study of Ayurveda Classical Text
6	Electives (Minimum Three) subjects		

First Professional B.A.M.S. Working days=320, Teaching hours=1920 Induction Program=15 Working days (90 hours) Remaining days/Hours=320-15=305 Days/1830 Hours			
Subject Code	**Number of teaching hours**		
	Lectures	**Non-Lectures**	**Total**
AyUG-SN & AI	100	200	300
AyUG-PV	90	140	230
AyUG-KS	150	250	400
AyUG-RS	180	320	500
AyUG-SA1	140	260	400
Total	**660**	**1170**	**1830**

Subjects for Second Professional B.A.M.S			
Sl. No	**Subject Code**	**Subject**	**Equivalent Term**
1	AyUG-DG	Dravyaguna Vigyan	Pharmacology and Materia Medica- Herbal
2	AyUG-RB	Rasashastra evam Bhaishajyakalpana	Materia Medica- Minerals & Metals and Pharmaceutical Science
3	AyUG-RN	Roga Nidan evam Vikriti Vigyan	Methods of Diagnosis, Diagnostic Procedures and Pathology
4	AyUG-AT	Agad Tantra evam Vidhi Vaidyaka	Clinical Toxicology and Medical Jurisprudence
5	AyUG-SA2	Samhita Adhyayan-2	Study of Ayurveda Classical Text
6	AyUG-SW	Swasthavritta evam Yoga	Lifestyle Management, Public Health and yoga
7	Electives (Minimum Three) subjects		

Sl.No.	**Subject Code**	**Number of teaching hours**		
		Lectures	**Non-Lectures**	**Total**
1.	AyUG-DG	150	250	400
2.	AyUG-RB	150	300	450
3.	AyUG-RN	150	300	450
4.	AyUG-AT	100	200	300
5.	AyUG-SA2	100	140	240
6.	AyUG-SW	150	250	400
Total		**800**	**1440**	**2240**

Subjects for Third Professional B.A.M.S			
Sl. No	**Subject Code**	**Subject**	**Equivalent Term**
1	AyUG-KC	Kayachikitsa including Manasa Roga, Rasayana and Vajikarana	Internal Medicine including Psychiatry, Rejuvenative Medicine, Reproductive Medicine and Epigenetics
2	AyUG-PK	Panchakarma & Upakarma	Therapeutic Procedural Management
3	AyUG-ST	Shalya Tantra	General Surgery
4	AyUG-SL	Shalakya Tantra	Ophthalmology, Oto-RhinoLaryngology & Oro-Dentistry
5	AyUG-PS	Prasuti Tantra evam Stree Roga	Gynecology and Obstetrics
6	AyUG-KB	Kaumarabhritya	Pediatrics

7	AyUG-SA3	Samhita Adhyayan-3	Study of Ayurveda Classical Text
8	AyUG-EM	Atyaikachikitsa	Emergency Medicine
9	AyUG-RM	Research Methodology and Medical-statistics	
10	Electives (Minimum Three) subjects		

Third Professional B.A.M.S. *Working days=320, Teaching hours=2240*				
Sl.No.	**Subject Code**	**Number of teaching hours**		
		Lectures	**Non-Lectures**	**Total**
1	AyUG-KC	150	300	450
2	AyUG-PK	100	200	300
3	AyUG-ST	125	250	375
4	AyUG-SL	100	200	300
5	AyUG-PS	100	175	275
6	AyUG-KB	100	175	275
7	AyUG-SA3	50	100	150
8	AyUG-RM	25	50	75
9	AyUG-EM	--	40	40
	Total	**750**	**1490**	**2240**

D. **Electives:**

a. Electives are introduced in B.A.M.S. curriculum to provide opportunity to student of Ayurveda to get introduced, exposed and oriented to various allied subjects that are required to understand and build inter-disciplinary approach.

b. The electives shall be conducted as online program.

c. Each elective subject shall be of forty-five hours duration and divided in five modules and each module shall have nine hours i.e., five hours of teaching, two hours of guided learning, one hour each for expert interaction/reflection and assessment and in total, each elective will have twenty-five hours of teaching, ten hours of guided learning, five hours of expert interaction/reflection and five hours of assessment (five assessments of one hour each).

d. The study hours for electives are over and above the prescribed teaching hours of B.A.M.S. under these regulations.

E. **Clinical training:**

a. Clinical training of the student shall start from the First Professional session onwards and subject related clinical training shall be provided in the attached hospital by the concerned faculty and department in non-lecture hours as per the requirement of the subject as under- (a) During first professional session, clinical training shall be provided by department of Samhita & Siddhanta and Kriya Sharira through the specialty Outpatient Department (OPD) and Inpatient Department (IPD) where in teachers of the above departments are consultants and screening OPD; wherein students involve in Prakriti and Saara assessment, practicing of naadi, recording of dosha vriddhi kshaya lakshanas, measurement of height, weight, calculation of Body Mass Index (BMI) etc. activities.

b. (a) Clinical training for the Second Professional session shall be as per clause A (iv) of sub regulation (1) of regulation 9 and clinical attendance shall be maintained by the concerned faculty and department. (b) Clinical training for the Second Professional session shall be provided in accordance with the requirement of subjects as under-

    i. (A). Department of Roganidana will provide clinical training through specialty clinics and IPD wherein teachers of Roganidana department are consultants. (B). Department of Agada Tantra through Visha Chikitsa OPD and IPD. (C). Department of Swasthavritta through swastha rakshna OPD and IPD.

    ii. In addition, the second professional B.A.M.S. students shall be posted to medicine dispensary to get familiar with prescription patterns, medicine names, forms, dosage, Aushada sevanakaala, anupana, sahapana, method of mixing or compounding of medicines etc. Similarly, in IPD nutritional assessment, pathya preparation unit or diet center to get familiarize with various pathya or therapeutic diet preparations.

SCHEME OF EXAMINATION

A. (i)The First Professional examination shall ordinarily be held and completed by the end of First professional session; (ii) the student who failed in one or two subjects of First Professional shall be allowed to keep terms of the Second Professional session and to appear in Second Professional examination; (iii) the student who failed in more than two subjects shall not be allowed to keep term in Second Professional session and the subsequent supplementary examination of First Professional shall be held at every six months.

B. (i) The Second Professional examination shall ordinarily be held and completed by the end of Second Professional session; (ii) the student who failed in one or two subjects of Second Professional shall be allowed to keep the term of the Third (Final) Professional session; (iii) the student who failed in more than two subjects shall not be allowed to keep term in Third (Final) Professional session and the subsequent supplementary examinations of Second Professional shall be held every six months.

C. (i) The Third (Final) Professional examination shall ordinarily be held and completed by the end of Third (Final) Professional session. (ii) Before appearing for Third (Final) Professional examination the students shall have to pass all the subjects of first and second professional and shall qualify nine electives. (iii) The subsequent supplementary examination of Third (Final) professional will be held at every six months.

D. There shall be no separate class for odd batch student (those students who could not keep the term) and the student has to attend the class along with regular batch or with junior batch as applicable.

E. To become eligible for joining the Compulsory Rotatory Internship program, all three professional examinations shall be passed and qualified in nine electives within a period of maximum ten years from the date of admission.

F. The theory examination shall have twenty per cent. marks for Multiple Choice Questions (MCQ), forty per cent. marks for Short Answer Questions (SAQ) and forty per cent. marks for Long Explanatory Answer Questions (LAQ) and these questions shall cover the entire syllabus of the subject.

G. The minimum marks required for passing the examination shall be fifty per cent. in theory component and fifty percent in practical component (that include practical,

clinical, viva-voce, internal assessment and electives wherever applicable) separately in each subject.

H. Evaluation of Electives: Electives shall be evaluated in terms of attendance and assessment and on the basis of evaluation, the student shall be awarded credits as well as grades as under-

a. one credit shall be awarded for attending minimum five hours of a modular program and a student can earn maximum five credits for each elective;

b. Assessment shall be conducted at the end of each module and average of five modular assessments shall be considered for grading i.e., up to 25 per cent. Bronze; 26-50 per cent. Silver; 51-75 per cent. Gold; 76 per cent. and above Platinum.

c. The structure of elective shall be as per the following table, namely:

<table>
<tr><td colspan="6">Each Elective: Five Modules of Nine Hours Each (5*9=45)</td></tr>
<tr><td rowspan="2">Sl.No.</td><td rowspan="2">Component</td><td colspan="2">Duration (Hours)</td><td>Credits</td><td>Grades</td></tr>
<tr><td>Module</td><td>Elective</td><td rowspan="5">One Credit for attending minimum of five hours of each modular program. Maximum five credits</td><td rowspan="5">Grade is awarded on the basis of average of all five modular assessments.
Bronze: <25 per cent.
Silver: 26-50 per cent.
Gold: 51-75 per cent.
Platinum: 76 per cent. & above.</td></tr>
<tr><td>1</td><td>Teaching</td><td>5</td><td>25</td></tr>
<tr><td>2</td><td>Guided Learning</td><td>2</td><td>10</td></tr>
<tr><td>3</td><td>Expert Interaction/ Reflection</td><td>1</td><td>5</td></tr>
<tr><td>4</td><td>Assessment</td><td>1</td><td>5</td></tr>
</table>

d. (a) Student shall have to qualify (obtaining any grade) minimum of three elective subjects for each professional session. (b) List of elective subjects shall be made available under three sets (A, B and C) for each professional session i.e., sets FA, FB and FC for first professional B.A.M.S.; sets SA, SB and SC for second professional B.A.M.S.; sets TA, TB and TC for third professional B.A.M.S. (c) Student may opt any one elective as per their choice from each set specified for respective professional B.A.M.S. (d) Weightage of two marks for each credit and maximum of ten marks shall be awarded for each elective. (e) These elective marks shall be added to the viva-voce marks of respective subjects as specified in these regulations. (f) Apart from three mandatory electives for each profession, students

have freedom to choose and qualify as many numbers of additional electives as per their interest. (g) Marks weightage shall be only for three electives per professional session i.e., one elective subject from each set of respective professional session. (h) A separate online certificate shall be generated for each elective mentioning credits earned and grades obtained.

e. **Awards:**

i. A candidate obtaining sixty-five per cent. and above marks shall be awarded first class in the subject and seventy–five percent and above marks shall be awarded distinction in the subject.

ii. The award of class and distinction shall not be applicable for supplementary examinations.

f. **Eligibility to appear examination:**

i. Each student shall be required to maintain minimum seventy-five percent attendance in each subject in theory (i.e., lecture hours) practical and clinicals (i.e., non-lecture hours) separately for appearing in examination.

ii. If a student fails to appear in regular examination for cognitive reasons, he may appear in supplementary examination as regular student and his non-appearance in regular examination shall not be treated as an attempt.

iii. Notwithstanding anything contained in these regulations:

1. Clause 11(e) shall be applicable to the student who admitted under Indian Medicine Central Council (Minimum Standards of Education in Indian Medicine) Regulations, 1986, except electives and as per section 3 of SCHEDULE I (as amended vide notification no. 24-14/2016 (U.G. Regulation) Regulations, 2016) with 4 professionals.

2. Student who got admitted under Indian Medicine Central Council (Minimum Standards of Education in Indian Medicine) Regulations, 1986, the maximum number of chances and maximum period of years to pass respective professional examination as laid down under the clauses 6(1)(c), 2(¢), 3(c), 4(d), and 4(e) of SCHEDULEI (as amended vide notification no. 24-14/2016 (U.G. Regulation) Regulations, 2016) shall not be applicable.

ASSESSMENT

Assessment of students shall be in the form of Formative and Summative Assessments as under-

(a) **Formative Assessment. -** Students shall be assessed periodically to assess their performance in the class, determine the understanding of program material and their learning outcome in the following manner,

(i) Periodical Assessment shall be carried out at the end of teaching of a topic or module or a particular portion of syllabus and the evaluation methods as per the following table may be adopted as suits to the content, namely:

Sl. No.	Evaluation Method
1.	Practical / Clinical Performance
2.	Viva Voce, MCQs, MEQ (Modified Essay Questions/Structured Questions)
3	Open Book Test (Problem Based)
4	Summary Writing (Research Papers/ Samhitas)
5	Class Presentations; Work Book Maintenance
6	Problem Based Assignment
7	Objective Structured Clinical Examination (OSCE), Objective Structured Practical Examination (OPSE), Mini Clinical Evaluation Exercise (Mini-CEX), Direct Observation of Procedures (DOP), Case Based Discussion (CBD)
8	Extra-curricular Activities, (Social Work, Public Awareness, Surveillance Activities, Sports or Other Activities which may be decided by the department).
9	Small Project

(ii) (a) internal evaluation shall be conducted by the College and Institute at the end of six months (First Term Test) for thirty per cent. of the syllabus and at twelve months (Second Term Test) for forty per cent. new part of the syllabus. (b) The remaining thirty per cent. of syllabus shall be completed in the last six months (Third Term) before university examination;

(iii) there shall be minimum three periodical assessments for each subject before First Term Test (ordinarily at 6th month of respective professional B.A.M.S.) minimum of three periodical assessment before Second Term Test (ordinarily at 12th month of

respective professional B.A.M.S.) and minimum of three periodical assessments before final university examinations (Summative Assessment) of respective professional B.A.M.S.

(iv) the scheme and calculation of assessment shall be as per the following tables, namely:

Sl.No.	Professional Course	Duration of Professional Course		
		First Term (1-6 Months)	Second Term (7-12 Months)	Third Term (13-18 Months)
1	First Professional B.A.M.S.	3 PA and First TT	3 PA and Second TT	3 PA and UE
2	Second Professional B.A.M.S.	3 PA and First TT	3 PA and Second TT	3 PA and UE
3	Third Professional B.A.M.S.	3 PA and First TT	3 PA and Second TT	3 PA and UE

PA: Periodical Assessment; TT: Term Test; UE: University Examinations

(b) **Summative Assessment:** (i) Final university examinations conducted at the end of each professional B.A.M.S. shall be the Summative Assessment.

(ii) There shall be double valuation system and shall be no provision for revaluation.

(iii) There shall be two examiner (one internal and one external) for university practical/clinical/viva voice examinations.

(iv) While declaring the results of Summative Assessment, Internal Assessment component and Elective marks shall be considered as per the distribution of marks pattern provided in Tables

Marks Distribution for First Professional B.A.M.S. Subjects

Sl.No.	Subject Code	Papers	Theory	Practical or Clinical Assessment					Grand Total
				Practical/ Clinical	Viva	Electives	IA		
1.	AyUG-SN & AI	2	200	-	75*	10 (Set-FA)	15		300
2.	AyUG-PV	2	200	100	60	10 (Set-FB)	30	200	400
3.	AyUG-KS	2	200	100	70	-	30	200	400
4.	AyUG-RS	2	200	100	70	-	30	200	400
5.	AyUG-SA1	1	100	-	75	10 (Set-FC)	15	100	200
									1700

Marks Distribution for Second Professional B.A.M.S. Subjects									
Sl. No.	Subject Code	Papers	Theory	Practical or Clinical Assessment					
				Practical or Clinical	Viva	Elective	IA	Sub Total	Grand Total
1.	AyUG-DG	2	200	100	70	-	30	200	400
2.	AyUG-RB	2	200	100	70	-	30	200	400
3.	AyUG-RN	2	200	100	70	-	30	200	400
4.	AyUG-AT	1	100	100	60	10 (Set-SA)	30	200	300
5.	AyUG-SA2	1	100	-	75	10 (Set-SB)	15	100	200
6.	AyUG-SW	2	200	100	60	10 (Set-SC)	30	200	400
							Grand Total		2100

Marks Distribution for Third Professional B.A.M.S. Subjects									
Sl.No.	Subject Code	Papers	Theory	Practical or Clinical Assessment					Grand Total
				Practical or Clinical	Viva	Electives	IA	Sub Total	
1	AyUG-KC	3	300	100	70	-	30	200	500
2	AyUG-PK	1	100	100	70	-	30	200	300
3	AyUG-ST	2	200	100	70	-	30	200	400
4	AyUG-SL	2	200	100	70	-	30	200	400
5	AyUG-PS	2	200	100	60	10 (Set-TA)	30	200	400
6	AyUG-KB	1	100	100	60	10 (Set-TB)	30	200	300
7	AyUG-SA3	1	100	-	75	10 (Set-TC)	15	100	200
8	AyUG-RM	1	50	-	-	-	-	-	50
								Grand Total	2550

MIGRATION

1) The students may be allowed to take the migration to continue their study to another college after passing the First Professional examination, but failed student's transfer and mid-term migration shall not be allowed.

(2) For migration, the students shall have to obtain the mutual consent of both colleges and universities and it shall be against the vacant seat.

COMPULSORY ROTATORY INTERNSHIP

I. The duration of Compulsory Rotatory Internship including Internship Orientation Program shall be one year and ordinarily commence on first working day of April for regular batch students and first working day of October for supplementary batch students.

II. The student shall be eligible to join the Compulsory Internship programme after passing all the subjects from First to Third (Final) Professional examination including nine electives and after getting Provisional Degree Certificate from respective universities and Provisional Registration Certificates from respective State Board or Council for Compulsory Rotatory Internship.

a. **Stipend**: During internship, to the interns belonging to Central Government, State Government and Union territory institution, the stipend shall be paid at par with other medical systems under respective government and there shall not be any discrepancy between medical systems.

b. **Migration during Internship**: (i) Migration of internship shall be with the consent of both the colleges and university; in the case where migration is between the colleges of two different universities. If migration is only between colleges of the same university, the consent of both the colleges shall be required. Migration shall be accepted by the university on the production of the character certificate issued by the institute or college and the application forwarded by the college and university with a 'No Objection Certificate' as the case may be.

c. **Orientation Program**: The interns shall mandatorily attend an orientation program regarding internship and it shall be the responsibility of the teaching institution to conduct the orientation before the commencement of the internship.

The orientation shall be conducted with an intention to make the intern to acquire the requisite knowledge about the Rules and Regulations of the Medical Practice and Profession, Medical Ethics, Medico-Legal Aspects, Medical Records, Medical Insurance, Medical Certification, Communication Skills, Conduct and Etiquette, National and State Health Care Program.

The orientation workshop shall be organized at the beginning of internship and a logbook shall be maintained by each intern, in which the intern shall enter date-wise details of activities undertaken by him during orientation.

The period of orientation shall be seven days. The manual for conducting the orientation as prescribed from time to time by the National Commission for Indian System of Medicine shall be followed.

d. **Activities during Internship:**

i. The daily working hours of intern shall be not less than eight hours; the intern shall maintain a logbook containing all the activities undertaken by intern during internship.

ii. Normally one-year internship shall be as under-

1. Option I.-Divided into clinical training of six months in the Ayurveda hospital attached to the college and six months in Primary Health Centre or Community Health Centre or Rural Hospital or District Hospital or Civil Hospital or any Government Hospital of Modern Medicine or Ayurveda Medicine or NABH (National Accreditation Board for Hospitals) accredited private hospital of Ayurveda. Only OPD based clinics having NABH accreditation shall not be eligible for internship.
2. Option II.- All twelve months in Ayurveda hospital attached to the college.

iii. The clinical training of six or twelve months, as case may be, in the Ayurveda hospital attached to the college or in non-teaching hospitals laid down by the National Commission for Indian System of Medicine shall be conducted as per the following table

Sl. No.	Departments	Option I	Option II
1	Kayachikitsa OPD including Manas Roga, Rasyan and Vajikarana, Swasthavritta and Yoga, AtyayikChkitisa, related specialties and respective IPD	1.5 months	3 months
2	Shalya OPD including OT,related specialties and respective IPD	1 month	2 months
3	Shalakya OPD, related specialties including OT, Kriayakalpa and respective IPD	3 weeks	1.5 months
4	Strirog evam Prasuti OPD related specialties including OT and respective IPD	3 weeks	1.5 months
5	Kaumarbhritya OPD related specialties including NICU, pediatric Panchakarma and respective IPD	0.5 month	1 month
6	Panchakarma OPD related specialties, Panchakarma therapy rooms and respective IPD	1 month	2 months
7	Visha Chikitsa OPD any other specialties, respective IPD, screening OPD, Pathya unit etc. (as per choice of internee)	0.5 month	1 month
8	Primary Health Centre or Community Health Centre or Rural Hospital or District Hospital or Civil Hospital etc.	6 months	-

e. **Leave for interns:** During compulsory rotatory internship of one year, twelve leaves are permitted and any kind of absence beyond twelve days shall be

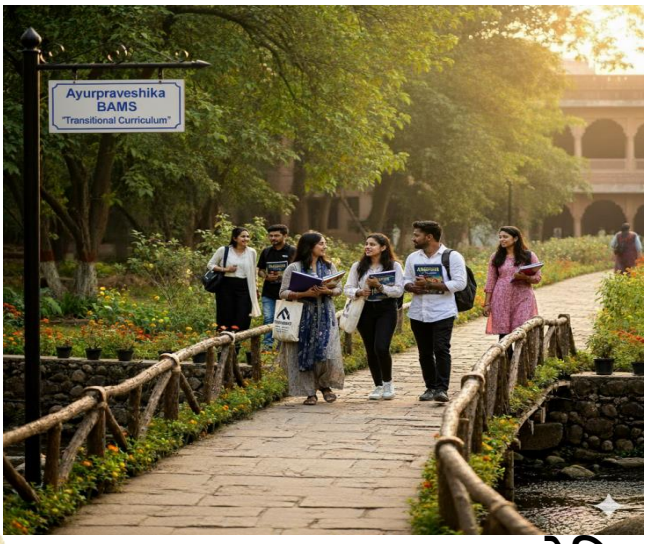
extended accordingly. Intern cannot take more than six days including prefix or suffix of any kind of holidays leave at a time.

f. **Completion of internship**: If any delay in the commencement of internship or abnormal break during internship due to unavoidable conditions, in such cases internship period shall be completed within maximum period of three years from the date of passing the qualifying examination of Third (Final) Professional B.A.M.S including First and Second Professional subjects and nine electives, specified as eligibility for internship:

Provided that in such cases, the student shall get prior permission from the head of the institution in written with all supporting documents and it shall be the responsibility of the head of the institution to scrutiny the documents, and assess the genuine nature of the request before issuing permission letter and while joining internship, the student shall submit the request letter along with supporting documents, and all necessary documents as mentioned in the sub-regulation (a) and undergo the internship orientation program as mentioned in the sub-regulation (d).

COURSE CURRICULUM FOR FIRST PROFESSIONAL BAMS

(PRESCRIBED BY NCISM)



Ayurpraveshika (आयुरप्रवेशिका)

"Transitional Curriculum"

(An introductory gateway into Ayurveda)

(Applicable from 2025-26 batches onwards for 5 years or until further notification by NCISM)

ncism

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BOARD OF AYURVEDA

NATIONAL COMMISSION FOR INDIAN SYSTEM OF MEDICINE

NEW DELHI-110026

Ayurpraveshika (आयुरप्रवेशिका)

"Transitional Curriculum for First Professional BAMS"

Introduction:

The students getting admitted to the Ayurveda graduate course (B.A.M.S) are from different backgrounds, different regions having different cultural and linguistic backgrounds. Their educational qualifications are also from diversified curriculums, i.e., state boards, CBSE, ICSE etc. studied in different mediums of languages. Ayurveda is a unique medical system with subjects and terminologies that are different and typical. Hence, there is a need to transit students of diversified backgrounds to the unique Ayurveda Medical Science and concerned institutional environment.

As per the National Commission for Indian System of Medicine (Minimum Standards of Undergraduate Ayurveda Education) Regulations-2022 it is mentioned that.-

9. (1) *(A) (i) (a) After admission, the student shall be inducted to the B.A.M.S. Programme through an Induction Programme not less than fifteen working days based on the Transitional Curriculum which intends to introduce newly admitted student to Ayurveda system of medicine and to make him well aware of the B.A.M.S. Programme he is going to study for next four and a half years.*

(b) During the induction programme, the student of Ayurveda shall learn basic of Sanskrit for Ayurveda and basic life support and first aid along with other subject as laid down in the syllabus.

(c) There shall be a fifteen-days induction programme which shall be not less than ninety hours, and each day may consist of six hours.

Objectives of Transitional Curriculum:

1. To inspire, engage and immerse new student of BAMS, into the world of Ayurveda through experiential learning and motivational interaction.
2. To Orient the college/institutional campus and the available facilities
3. To introduce the officials of the campus, hierarchy and their roles. Orientation to office procedures, campus rules and regulations, code of conduct and dress codes, if any, rules and procedures for availing leave, procedures for availing library facility, anti-ragging committee & squad, safety apps, and so on.
4. To make aware of integral vision and view of Indian Knowledge System (IKS), Human Wellbeing. Scientific perspective i.e. logical analysis to understand the material world, technological advancement and scientific progress in human development.
5. To explain the Scientific view of different medical systems including ISM in the contemporary world, higher education in Ayurveda, job opportunities, entrepreneurship, etc.
6. To provide overview of the BAMS curriculum.
7. To Orient the Regulatory/Academic/Research bodies and their introduction.
8. To explore Sanskrit Language orientation and Spoken Sanskrit.
9. To Orient the basic computer skills and Ayurveda E- resources.
10. To make familiar with Personality development, Team building, Gender sensitization etc.
11. To introduce concepts of Goal setting

Why This Is Advanced & Contextual:

Holistic Development: Merges academic orientation with practical, emotional, and ethical dimensions.
Integration: Breaks silos between theory, clinical exposure, and inter-disciplinary learning—endorsed by NCISM
Research Emphasis: Early introduction to electives & evidence-based practice prepares students for scholarly pursuits.
Wellness-Focused: Mental and physical wellbeing is prioritized, reflecting NCISM mandates
Professional Preparedness: Early training in professionalism, ethics and communication expected to shape competent students and ensure highly qualified future practitioners.

Pre-Test, Post-Test & Feedback:

- Pre-Test & Post-Test shall be from the same questionnaire. (Annexure 1)
- The test shall comprise questions on awareness of Ayurveda, BAMS programme details.
- The questions shall be within the framework of the transitional curriculum.
- The questionnaire should include 30 questions (as mentioned in Annexure 1)
- Google forms are preferred.
- Results of the pre-test and post-test are compared. Post-test results should indicate that students achieved the course outcome.

Duration of the Course: The Transitional Curriculum shall be of ninety hours (Preferably 6 hrs x 15 days)

Day wise Schedule of Events:-

Day - 1			
Time	**Topic for the Hour**	**Activity**	**Expected Outcome** (Students should…..)
9:00–10:00 AM	Inaugural Ceremony & Dhanvantari Homa	Lamp lighting, prayer chanting, Dhanvantari Shloka recitation	Feel welcomed, understand cultural importance of Lord Dhanvantari in Ayurveda, and develop a sense of belonging
10:00–11:00 AM	Know Your College	Timeline Creation – Students draw a visual timeline of the institution's milestones	be aware of the institution's history, values, and achievements; stronger connection with college identity
11:00 AM–12:00 PM	Learning from Seniors	"Ask Me Anything" – Q&A with seniors; "Message to My Future Self" – personal reflection writing. Interaction with senior students	Get inspired from peer experiences; motivation to set academic and personal goals
BREAK: 10 mins			
12:10–1:00 PM	Pre-Test & Parent Interaction (Annexure – 1)	Google Form pre-test (30 questions); Parent–student guided Q&A	Get baseline knowledge assessment; mutual understanding of academic journey expectations
1:00–2:00 PM	**Lunch Break**		
2:00–3:00 PM	Campus Orientation – Part 1	Campus visit- academic blocks/department visits/meet faculty of Rachana, Kriya & Samhita Encouraging observational learning	Be familiar with academic spaces; improved campus navigation
3:00–4:00 PM	Campus Orientation – Part 2	Photography in academic block, herbal garden, hospital, OPD/IPD, pharmacy, library etc.	Recognize the key campus facilities and their functions
4:00–4:50 PM	Day Reflection: Icebreakers & Faculty Interaction	Group sharing, fun intro games	Feel comfort in interacting with peers and faculty; better integration into academic community
4:50–5:00 PM	Mindfulness	Sitting in silence, Guided breathing & relaxation	Experience reduced stress, improved focus, and calm closure to the day

Day - 2			
Time	**Topic for the Hour**	**Activity**	**Expected Outcome**
9:00–9:10 AM	Dhanvantari Prayer & Thought for the Day	Short group recitation and daily reflection	Build a positive mindset and strengthens connection to Ayurvedic traditions
9:10–10:00 AM	Administrative Structure: Who is Who in the College Campus Rules, Regulations & Dress Code: General conduct, timings, and campus policies.	Interactive introduction to Principal, Dean, Head of the Dept. and key staff Debate on "Why rules and discipline help learning"	Get acquainted with the official, administrative and academic teams, their roles, and whom to approach for academic/administrative needs Understanding of campus rules, discipline benefits, and dress code importance
10:00–11:00 AM	Introduction to Ayurveda and History	Discuss on Ayurveda Avatarana from different Sampradayas	know history of Ayurveda since Vedic period and its establishment on planet earth
11:00 AM–12:00 PM	Administrative Procedures: Leave applications, attendance policies, and fee payments.	Role-play: applying for leave, reporting grievances, library check-in	Feel Confident in handling administrative procedures independently
BREAK: 10 mins			
12:10–1:00 PM	Student Safety: & Ragging-Free campus Finding Help When Needed. Detailed session on student grievance redressal mechanism.	Simulation of anti-ragging scenarios; Poster-making – "Say No to Ragging" Problem–solution mapping of student concerns	Be aware of anti-ragging laws, reporting mechanisms, and personal safety measures Ability to identify and access the right support channels when required
1:00–2:00 PM	**Lunch Break**		
2:00–3:00 PM	Basic principles of Ayurveda and Trisutra (Hetu, Linga, Aushadha)	Discussion on purpose of life and lifestyles	know concepts of Panchamahabhuta, Mana, Atma, and other relevant basic principles of Ayruveda
3:00–4:00 PM	Library Orientation	Library visit and digital resource search (PubMed, AYUSH portal)	Be Familiar with library facilities, catalogue search, classical text and online research tools
4:00–4:50 PM	Reflection: "Ayurveda & Me"	Group circle discussion on why each student choose BAMS	Improve self-awareness, peer bonding and clarity of personal motivation
4:50–5:00 PM	Mindfulness	Short guided meditation/ Silent sitting	be Calm at the end of the day; improved focus and emotional balance

Day - 3			
Time	**Topic for the Hour**	**Activity**	**Expected Outcome**
9:00–9:10 AM	Dhanvantari Prayer & Thought for the Day	Group recitation & short reflection	Cultivate respect for tradition and sets a positive tone for learning
9:10–10:00 AM	What is Indian Knowledge System (IKS)? Overview: Orientation lecture on Vision of reality,	Storytelling: share one traditional home practice for health; Discussion – *"How is*	Understand of Ayurveda's holistic philosophy and its place in Indian heritage Appreciation of India's scientific

	Holistic view of human wellbeing.	*Ayurveda's vision of health unique?"/* Quick quiz on ancient contributions in ancient medicine, Technology and Science etc.	heritage and its relevance to health systems
10:00–11:00 AM	Introduction to Ashtanga Ayurveda	Sloka recitation of eight branches of Ayurveda	know 8 branches of Ayruveda with application of modern advancement
11:00 AM–12:00 PM	Interdisciplinary exposure	Debate Ayurveda in various systems of medicine.	have knowledge of modern medical system and Indian Medical System
BREAK -10mins			
12:10–1:00 PM	Overview of other Indian Medical Systems: Unani, Siddha, Sowa Rigpa, Yoga Naturopathy & Homeopathy	Interactive quiz/discussion	have Awareness of the diversity of Indian health systems.
1:00–2:00 PM	**Lunch Break**		
2:00–3:00 PM	Scope of Ayurveda: Current status, legal recognition, and national scope. Global Scope of Ayurveda: Growing acceptance and international opportunities.	Fact search on AYUSH and NCISM portals. World map pin-up activity – mark countries recognizing/practicing Ayurveda (online/ offline)	Understanding of Ayurveda's recognition, current scope, and institutions. Awareness of global opportunities and international acceptance of Ayurveda.
3:00–4:00 PM	Concept of 'Anand' the true goal of healing lessons from Taittarreeya Upanishad.	Discussion on experimental feeling of actual happiness	understand actual meaning and feeling of Anand (Happiness) as per Upanishad
4:00–4:50 PM	Ayurveda and Yoga as India's soft power diplomacy through wellness	Group discussion on surprising or inspiring insights from IKS	encourage global perspective and pride in Ayurvedic and Yoga identity
4:50–5:00 PM	Mindfulness	Gratitude practice, focusing on cultural heritage/Meditation	reinforce appreciation for tradition and nurtures mental calmness

Day - 4			
Time	**Topic for the Hour**	**Activity**	**Expected Outcome**
9:00–9:10 AM	Dhanvantari Prayer & Thought for the Day	Group recitation & brief reflection	Create a mindful start to the day, reinforcing Ayurveda's spiritual foundation
9:10–10:00 AM	Proposed Higher Education Pathways in Ayurveda (M.D./M.S./Ph.D., Super specialty courses	Watch videos/read short bios of MD/PhD professionals; Create career flowchart	have the understanding of postgraduate and research opportunities after BAMS
10:00–11:00 AM	Different Career opportunities after BAMS: Practice, wellness centers, Pancha Karma Units, Govt. Ay. Dispensary, Entrepreneurship	Alumni talk (live or recorded); Role exploration: *"If I were a…"*	be exposed to diverse roles in clinical practice, academia, and research, Entrepreneurship and in other fields
11:00 AM–12:00 PM	Ayurveda beyond Practice: Capacity Building activities in Entrepreneurship development in context of	Visit; introduction and entrepreneurial activity done in the college by Research innovation and	have Awareness of self-employment opportunities and market trends

	Ayurveda field.	entrepreneurship development cell (RIEDC).	
BREAK - 10mins			
12:10–1:00 PM	Concept of Dosha, Dhatu, Mala in brief with application aspects	Concept reflection: *"How is Tridosha seen in patients?"*; Analogy building using daily life examples	understand Ayurveda's unique diagnostic and therapeutic principles
1:00–2:00 PM	**Lunch Break**		
2:00–3:00 PM	Overview of BAMS Curriculum; Introduction to the competency-based curriculum and syllabus of First Professional BAMS subjects.	Subject puzzle (First Year); Timeline exercise marking academic milestones	be familiar with the competency-based curriculum and academic expectations
3:00–4:00 PM	Introduction to Rachana Sharir concepts, Syllabus, Orientation on cadaver room etiquettes.	Model charts, cadaver room, specimen organs	know overall details of the department and to be familiar with etiquettes
4:00–4:50 PM	Healing Hands and Compassionate Hearts: Reflection activity	Group sharing on readiness for clinical responsibilities	encourage self-reflection and professional mindset
4:50–5:00 PM	Mindfulness	Guided meditation/ breathing with a focus on career visualization	enhance focus and motivation for professional growth

Day - 5			
Time	**Topic for the Hour**	**Activity**	**Expected Outcome**
9:00–9:10 AM	Dhanvantari Prayer & Thought for the Day	Group recitation & short reflection	have positive tone and connects students to Ayurvedic tradition
9:10–10:00 AM	Sharir Kriya Orientation details of syllabus	Pulse respiration assessment practice visit dept/lab, charts models etc.	be familiar with subject and department of Sharir Kriya
10:00–11:00 AM	Introduction to Bruhatrayi – Charaka, Sushruta, Vagbhata	Three-corner debate: Charaka vs. Sushruta vs. Vagbhata; Quote matching activity	Understand the contributions and specialties of each Samhita
11:00 AM–12:00 PM	Laghutrayee with elaboration of Ashtang Hridaya	Discussion on difference between Ashtang Sanghrah and Ashtang Haridaya	know the significance of Laghutrayee for better understanding of principles of ayurveda
BREAK - 10mins			
12:10–1:00 PM	**वदतुसंस्कृतम्** Sanskrit Orientation, Basics of Sanskrit alphabet, pronunciation or as annexed (Annexure – 2)	Writing drill: vowels and consonants in Devanagari/ Didactic with video, chant slokas of ayurveda (Ashtang Hriday Charaka Samhita)	be familiar with the script used in classical Ayurvedic texts
1:00–2:00 PM	**Lunch Break**		

2:00–3:00 PM	Indian Philosophical system – Overview of Darshanas linking to Ayurveda, Sankhya, Nayaya, Vaisheshika	Group discussion on Darshanas concepts	understand life and ideas to find truth and freedom
3:00–4:00 PM	Who is good Vaidya (Charaka's view) professional code of conduct/personal code of conduct	Discussion on modern challenges	have better understanding of Chikitsa chatushpada
4:00–4:50 PM	Reflection activity: why have chosen Ayurveda (My Roots in Ayurveda)	Group sharing: Which Samhita do you resonate with most and why?	encourage personal connection with Ayurvedic heritage
4:50–5:00 PM	Mindfulness	Guided visualization with meditation on connecting with ancient Ayurvedic wisdom	promote respect for tradition and calm closure to the day

Day - 6			
Time	**Topic for the Hour**	**Activity**	**Expected Outcome**
9:00–9:10 AM	Dhanvantari Prayer & Thought for the Day	Group recitation & reflection	promote cultural grounding and mindful start to the day
9:10–10:00 AM	Self-directed, self-motivated, learning skills and studying skills	Self-studies strategies, library skills, time management	empower students to learn effectively efficiently/skillfully
10:00–11:00 AM	Public Health and Ayurveda in community (Role of Ayurveda in Public Health	Search for activities of National Ayush Mission	understand broader societal roles of Ayurveda professionals
11:00 AM–12:00 PM	Regulatory Bodies; NCISM, concerned Universities, Directorate of Ayush, State ISM Registration councils	Draw NCISM organizational tree; Rapid-fire quiz on functions/policies	understand of all regulatory bodies structure, roles, and regulatory importance
BREAK - 10mins			
12:10–1:00 PM	**वदतुसंस्कृतम्** Sanskrit Orientation – Basic Grammar or as annexed (Annexure – 2)	Verb conjugation drill; Sanskrit sorting game	Be familiar with Sanskrit language
1:00–2:00 PM	**Lunch Break**		
2:00–3:00 PM	Healthy Food, Diet pattern, Nutritional plate, Nutritional values usually required	May refer Ayurveda Ahara Regulations (FSSAI – Ayurveda Ahara, 2021) making Ay. Herbal tea, balanced Ay. Plate	understand dietary regulations, safe food practices, and health benefits Have the ability to design an Ayurvedic meal plan and recognize therapeutic foods.
3:00–4:00 PM	Padartha Vigyana orientation in brief with detailed elaboration of Tantrayuktees	Discussion on practical application in day-to-day life	know better understanding of principles of Padartha Vigyana.

4:00–4:50 PM	Ayurvedic pathology, Nidana Panchaka framework understanding disease in Ayurveda beyond pathogens	Discuss on causative factors beyond pathogenic virus, bacteria and other organisms	Encourage linking traditional wisdom of positive factors of disease manifestation
4:50–5:00 PM	Mindfulness	Observation of Breath and body	Improve self-awareness and relaxation before closing the day

Day - 7			
Time	**Topic for the Hour**	**Activity**	**Expected Outcome**
9:00–9:10 AM	Dhanvantari Prayer & Thought for the Day	Group recitation & short reflection	promote a calm and focused start
9:10–10:00 AM	Ayurveda and Neuron mental science. Role of Ritucharya and Dinacharya in climate adaptation.	Discuss on herbal drinks according to ritus. Track your dinacharya and plan ritucharya for present local climate	know ritus and to be familiar with dinacharya accordingly
10:00–11:00 AM	First aid training basic/cuts wound, sprains, shock, bleeding and other common emergency situations	First-aid simulations	ensure preparedness for clinical situations.
11:00 AM–12:00 PM	Basic life support (BLS) training, Emergency protocols, CPR theory (adults, children, infants)	Role-play conscious/unconscious choking scenarios Watch CPR demo video; Group discussion on age-based differences Hands-on CPR practice	Understand correct CPR sequence and differences in technique as per age group.
BREAK - 10mins			
12:10–1:00 PM	Inspirational talk by senior Vaidya/Professor about why ayurveda is more relevant than ever/my journey as an ayurvedic doctor	Question answer session/interaction	inspire and motivate students to practice ayurveda for the benefit of society
1:00–2:00 PM	**Lunch Break**		
2:00–5:00 PM	Half day field visit	Ayurvedic herbology, field visit, herbal garden, incubation center, Ayurveda hospital, district ayurveda hospital, medicine manufacturing unit, any nearby Institute of National Importance (Anyone which is convenient as per availability nearby institution)	participate in outreach activities

Day - 8			
Time	**Topic for the Hour**	**Activity**	**Expected Outcome**
9:00–9:10	Dhanvantari Prayer &	Group recitation & reflection	create a mindful and focused start

AM	Thought for the Day		
9:10–10:00 AM	Research awareness and evidence based ayurveda: Orientation	Discussion on basics of research methodology and data interpretation, read a published paper	demonstrate and encourage evidence based ayurveda and research scope
10:00–11:00 AM	Hand Hygiene & Universal Precautions. Infection Control Measures	WHO 7-step hand washing demo. Gloves, masks, aprons, waste handling	be able to perform correct hand hygiene procedure in clinical settings. Able to wear and remove gloves, masks and aprons.
11:00 AM–12:00 PM	Heritage in young hands: Youth as brand ambassadors of Ayurveda	Search for Start-ups, wellness industry on digital platforms.	know, How students can take Ayurveda to society And National & Global wellness industry.
BREAK - 10mins			
12:10–1:00 PM	**वदतुसंस्कृतम्** Spoken Sanskrit: Common communicational Phrases in class or as annexed (Annexure – 2)	Sanskrit basics focused on ayurvedic terminology and classical texts	be able to use basic Sanskrit terms in classroom, build linguistic foundation
1:00–2:00 PM	**Lunch Break**		
2:00–3:00 PM	A healer's duty to health and environment, eco responsibility: Biomedical Waste Management Principles	Color code game – match items to bins	be able to segregate biomedical waste as per safety norms
3:00–4:00 PM	**e-samskara**, building digital competence: Basic Computer Skills: MS Word, excel, PowerPoint etc. with AI.	Create PPT slides using presentation templates	be able to create and format a simple document for assignments/reports, able to prepare usually clear innovative academic presentations.
4:00–4:50 PM	Environmental hygiene: Concept of "Janapadadwamsa" in ayurveda and its relevance to environmental hygiene	Swachata abhiyana of surrounding environment, discussion on role of hygiene in professionalism	develop awareness of hygiene linked to health, health care and self-discipline.
4:50–5:00 PM	Mindfulness	Slow breathing aligned with gentle stretches	have Physical relaxation and mental clarity at the end of the day

Day - 9			
Time	**Topic for the Hour**	**Activity**	**Expected Outcome**
9:00–9:10 AM	Dhanvantari Prayer & Thought for the Day	Group recitation & reflection	promote focus and connection to tradition
9:10–10:00 AM	Role of Artificial intelligence in Academics AI in education, diagnostic research	Group discussion on different AI tools and their better utility in study circle, use of AI for data mining from classical texts.	be Easy to access required study material to gain efficiency in academics, adoptive learning platforms.
10:00–11:00 AM	Nation building: Ayurveda as a pillar of India's Health security.	Discussion: Ayurveda for Atma Nirbharata.	know the Contribution of Ayurveda & Ayush integration in National Health Policy.

11:00 AM–12:00 PM	Glory of Ayurveda in Global Health	Discussion on WHO GCTM (Global Centre for Traditional Medicine)	know How Ayurveda is recognized by WHO & practiced world wide
BREAK - 10mins			
12:10–1:00 PM	वदतुसंस्कृतम् Spoken Sanskrit: Ayurvedic Terminology Pronunciation or as annexed (Annexure – 2)	Group recitation; Shloka pronunciation drills	be able to use basic Sanskrit terms in classroom, build linguistic foundation
1:00–2:00 PM	**Lunch Break**		
2:00–3:00 PM	Ayurveda & Communication/ media studies	Countering misinformation of Ayurveda.	understand role of Ayurveda in Public discourse & branding it at Global wellness industry.
3:00–4:00 PM	Ayurveda ethics & Philosophy in context of Sadvritta	Refer & Discuss Sadvritta & Bioethics.	be familiar with Professional values Life ethics, Compassion & integrity in Health care.
4:00–4:50 PM	Guest Health policy in Lecture - Charak Samhita, Ayurveda's role in shaping Modern Health diplomacy.	Search relevant context in Charak Samhita.	know significance of Charak Samhita in today's scenario
4:50–5:00 PM	Mindfulness	Gentle breathing with gratitude feeling	promote ethical reflection and inner calmness

Day - 10			
Time	**Topic for the Hour**	**Activity**	**Expected Outcome**
9:00–9:10 AM	Dhanvantari Prayer & Thought for the Day	Group recitation & reflection	build focus and cultural grounding
9:10–10:00 AM	Pride in becoming a Healer--Interactive session	Discuss on different healing modalities.	know & to be proud of becoming a future healer of the society.
10:00–11:00 AM	Success Stories of Ayurveda in action: real life patient care success story by expert in modern research	Alumni talk on clinical/research/entrepreneurs hip; Vision board creation	get motivated from role models; personal goal visualization. Ex. rasayana, integrative oncology.
11:00 AM–12:00 PM	Integrative tradition with ambition: Goal setting in ayurveda education	Write SMART goals for academic & professional life under the heading of vision for Vikasit Bharat 2047.	build competence in Ashtanga Ayurveda, setting milestones for learning and service.
BREAK – 10 mins			
12:10–1:00 PM	**वदतुसंस्कृतम्** Spoken Sanskrit: Introduction to Chhandas or as annexed (Annexure – 2)	Chhandas chanting practice	have Aware of rhythmic patterns in Sanskrit shlokas
1:00–2:00 PM	**Lunch Break**		
2:00–3:00 PM	Effective time management strategies: 'Sankalpa to	Design a weekly planner for studies & personal time	have Skills to balance academics, practice, and self-care

	Siddhi' – Time management for obtaining academic and clinical excellence.		
3:00–4:00 PM	Ayurveda & Personalized Medicine. Prakriti as a key to preventive and curative health.	Self-Prakriti Assessment by seniors.	know concept of Prakriti pariksha as the original personalized Health Model, now validated by Genomics.
4:00–4:50 PM	Reflection: becoming a Vaidya, discovering my Path to Purpose	Share one personal goal set during the day	Increase self-awareness and commitment to personal growth towards transformation.
4:50–5:00 PM	Mindfulness	Guided breathing with focusing on goal visualization	Reinforce commitment and clarity in personal direction

Day - 11			
Time	**Topic for the Hour**	**Activity**	**Expected Outcome**
9:00–9:10 AM	Dhanvantari Prayer & Thought for the Day	Group recitation & reflection	create a calm, focused start to the day
9:10–10:00 AM	Ayurveda Psychology—correlations of Satva, Rajas, Tamas with Modern Psychology,	Discuss on Bhoot vidya of Astangas, ancient insights for modern minds.	know Triguna Concept in the context of present Modalities of stress management.
10:00–11:00 AM	Applying Triguna theory for Emotional Intelligence, Stress management and Atmanirbharata	Discussion on harmony of mind: Triguna insights for students	know triguna in today's world: relevance of Satva, Raja, Tamas – ancient wisdom with modern day student life and society.
11:00 AM–12:00 PM	National Health Programmes & Role of Ayurveda.	Make a calendar of National Health Programmes.	know National Health Programmes for active participation & to understanding role of Ayurveda.
BREAK - 10mins			
12:10–1:00 PM	वदतुसंस्कृतम् Shloka Recitation Practice or as annexed (Annexure – 2)	Group chanting session for accurate pronunciation	have better rhythm, clarity, and confidence in Sanskrit recitation
1:00–2:00 PM	**Lunch Break**		
2:00–3:00 PM	Cultural Competence & Disability Awareness: empathy as therapy to disability care and rehabilitations	Discussion on Healing without barriers, disability awareness, inspiring students to be compassionate.	Have Awareness of patient challenges; improved empathy in care
3:00–4:00 PM	Soft skills & Life skills in Ayurvedic context, building collaborative skills (Communication & empathy-based care)	Audio visual experience, discuss on personal and professional competencies expected for a student.	Discipline, Observation, Patience & leadership rooted in Dharma, adoptability, decision making, integrity.
4:00–4:50 PM	Reflection: "Empathy and Expression"	Group discussion on inclusivity in Ayurveda	encourage compassion, active listening, and cultural sensitivity
4:50–5:00 PM	Mindfulness	Observation of self/ meditation	Enhance awareness and compassion

Day - 12

Time	Topic for the Hour	Activity	Expected Outcome
9:00–9:10 AM	Dhanvantari Prayer & Thought for the Day	Group recitation & reflection	Create a calm, respectful start to the day
9:10–10:00 AM	Ayurveda and agriculture (Krishi Ayurveda)	discussion on Ayurvedic Principles of soil and plant health	Be familiar on sustainable agriculture and organic farming
10:00–11:00 AM	What are the risk if technology overtakes human wisdom? Digital toxicity.	Check your college website and learning websites. Debate on different selected crisis and situation. (**"No mobiles day"**)	reinforce technology and AI just a tool but not as a replacement of human knowledge. appreciate the balance between timeless wisdom and emerging scientific tools.
11:00 AM–12:00 PM	Ayurveda and Economics of Health: Ayurveda's role in preventive healthcare, affordability and sustainable health economics.	Discussion on cost effective healthcare vs modern health economics. (SDG)	understand the relevance of Ayurveda in reducing healthcare burden. Orientation on Ayurveda in Health and Global Economy.
BREAK - 10mins			
12:10–1:00 PM	वदतुसंस्कृतम् Sanskrit Practice: Interactive Grammar or as annexed (Annexure – 2)	Noun declension game; Verb conjugation relay	improve recall and application of basic Sanskrit grammar rules
Lunch Break	**Lunch Break**		
2:00–3:00 PM	Presentation Skills: Structuring an Academic Presentation with good content.	Storyboard layout; Slide critique	be able to design logically structured and visually clear presentations
3:00–4:00 PM	Digital Literacy: Learning Management System (LMS) Orientation "How Will LMS Help Your Academic Success?"	Login, navigation, uploading a sample assignment Group discussion	be able to use LMS for accessing resources and submitting work Encourages independent learning and responsible/judicious use of digital tools
4:00–4:50 PM	Ayurvedic perspective of Deaddiction: role of Satvavjeya chikitsa and rasayana	Discussion: sharing of key insights by students	be aware of personal addiction free lifestyle.
4:50–5:00 PM	Mindfulness	Guided breathing/ silent sitting awareness	enhance focus before ending the day

Day - 13			
Time	**Topic for the Hour**	**Activity**	**Expected Outcome**
9:00–9:10 AM	Dhanvantari Prayer & Thought for the Day	Group recitation & reflection	promote a mindful and focused start
9:10–10:00 AM	Academic Writing: Introduction to Scientific Writing & Plagiarism	Paragraph editing activity	understand of research writing structure, citations, and plagiarism avoidance
10:00–11:00 AM	Orientation on national tobacco control programme	Discussion on tobacco cessation centers	get acquainted with tobacco deaddiction programme

11:00 AM–12:00 PM	Orientation on co-curricular arrangement, indoor outdoor sports facilities, house formation (Allotment of students to mentors)	Discussion on students cliubs, associations, club activity	awareness on co-curricular opportunities for skill development.
BREAK – 10 mins			
12:10–1:00 PM	वदतुसंस्कृतम् Sanskrit Practice Session or as annexed (Annexure – 2)	Storytelling in Sanskrit (simple phrases); Group recitation	improve spoken fluency and confidence in Sanskrit
1:00–2:00 PM	**Lunch Break**		
2:00–3:00 PM	Basic understanding of Ashtanga yoga for physical and mental well-being.	Search for videos of proper pranayama, yoga, dyana.	know Patanjali yoga sutra for better health and better living.
3:00–4:00 PM	Swasthya, Satya, Seva: The ayurveda student's commitment of self, society and world.	Discuss on social responsibility	maintain their own health, NCISM's vision of Scientific excellence and compassion.
4:00–4:50 PM	Discussion on outreach activity of 14th day.	Planning to visit nearby village.	know complete day outreach activity details.
4:50–5:00 PM	Mindfulness	Short gratitude-based meditation	End the day with focus and appreciation

Day - 14			
Time	**Topic for the Hour**	**Activity**	**Expected Outcome**
9:00 AM–5:00 PM	"Jeevaneeya" (Ayurveda Arogya mitra Abhiyan) visit of nearby village/rural area	Student outreach programme.- Rural house visits with questionnaire for interaction. (physical, mental, social, cultural conditions, health aspects, food and habits) One student has to visit one home\family and adopt to keep a follow-up of the family throughout his/her academic journey. **Note:** • Till completion of his/her studies one should adopt the family and serve as **Ayurveda Arogya Mitra**, for that home/family throughout the period. • Language may not be any barrier at all.	Linking rural public to Ayurvedic concepts of health preservation.

Day - 15			
Time	**Topic for the Hour**	**Activity**	**Expected Outcome**
9:00–9:10 AM	Dhanvantari Prayer & Thought for the Day	Group recitation & reflection	set a mindful and respectful tone for the final day

9:10–11:30 AM	Talent show; the talent exhibition, talented students are to be identified and recorded. Such students are encouraged to participate in institutional activities and to participate in various events.	Performing Arts, Visual Arts, Literary & Intellectual Talents, Innovation & Technical Skills, Leadership & Management Talents	identify individual interest and talents
11:30 AM–12:00 PM	Post-Test	Individual assessment	measure knowledge gained during the programme
BREAK - 10mins			
12:10–1:00 PM	Feedback Collection	Written + oral feedback on programme content & delivery	provide actionable suggestions for improvement
1:00–2:00 PM	**Lunch Break**		
2:00–4:30 PM	Reflection on Mindfulness	Gratitude reflection for the entire programme	encourage closure with positivity and purpose
2:00–5:00 PM	Valedictory Function	Sharing future vision, felicitation, awards for assignments/projects Final address by Principal/Dean Group Photo Informal Interaction	encourage pride and motivation to excel in BAMS journey Recognize student participation and achievements
Note	a) Institutes can shuffle the sequence of topic and activities as per the availability of the Resource person and institutional faculties according to their convenience. b) Proposed 30 MCQ questionnaires are enclosed for reference, provided the institute can frame their own setup 30 MCQ accordingly also.		

Annexures

Annexure 1

Pre-Test & Post-Test Questionnaire

(Use same for both before and after the 15-day program)
Total Questions: 30 (Mix of MCQs)

1. What is the full form of BAMS?
   a) Bachelor of Alternative Medical Science
   b) Bachelor of Ayurvedic Medicine and Surgery
   c) Basic Ayurveda and Medical Studies
   d) Bachelor of Allied Medical Science
2. What does the term "Ayurveda" mean?
   a) Science of life
   b) Art of medicine
   c) Ancient healing
   d) Natural food
3. Ayurveda emphasizes balance of which elements?
   a) Vata, Pitta, Kapha
   b) Mind, Body, Soul
   c) Air, Water, Earth
   d) Heart, Brain, Liver
4. Is Ayurveda only a system of herbal medicine?
   a) Yes, it deals only with herbs and plants.

b) No, it includes diet, lifestyle, mental well-being, and therapies along with herbal medicine
c) Yes, Ayurveda is exclusively about herbal medicine.
d) No, Ayurveda is only about spiritual healing.

5. Which of the following is an Ayurvedic dietary principle?
   a) Eat only fruits
   b) Follow Ritucharya
   c) Avoid all grains
   d) Fast daily
7. 4. How many limbs are described in Ashtanga Yoga according to Patanjali?
   a) 4
   b) 6
   c) 8
   d) 12
8. How many years is the BAMS program (excluding internship)?
   a) 3 years
   b) 4.5 years
   c) 5 years
   d) 6 years
9. How long is the compulsory internship after BAMS?
   a) 1 month
   b) 6 months
   c) 12 months
   d) 2 years
10. In Ayurveda, which dosha is associated with the elements of air and space and governs movement in the body?
    a) Pitta
    b) Kapha
    c) Vata
    d) Agni
11. Which regulatory body governs BAMS education in India?
    a) AICTE
    b) NCISM
    c) MCI
    d) NMC
11. What is the name of your institution?
    Provide options
12. Who is the head of your institution?
    Provide options
13. What does NCISM stand for?
    a) National Council of Indian System of Medicine
    b) National Commission for Indian System of Medicine
    c) National Committee on Indian Science & Medicine
    d) None of the above
14. AYUSH stands for:
    a) Ancient Youth Understanding of Science & Healing
    b) Ayurveda, Yoga & Naturopathy, Unani, Siddha, Homeopathy
    c) Ayurveda, Yunani, Siddha, Herbalism
    d) Ayurvedic Youth Services Hub
15. What is the Sanskrit word for "health"?
    a) रोग (Roga)
    b) आयु (Āyu)
    c) स्वास्थ्य (Svasthya)
    d) जीवन (Jīvana)
16. What is the Sanskrit name of your course subject “Physiology”?
    a) कायचिकित्सा
    b) शरीरक्रिया विज्ञान
    c) आयुर्विज्ञान

d) रचनाशरीर

17. What is the correct Sanskrit translation of the sentence "I am a student"?
    a) अहं पाठशाला गच्छामि।
    b) अहं शिक्षकः अस्मि।
    c) अहं छात्रः अस्मि।
    d) अहं पठामि।
18. What is the function of a web browser?
    a) Type documents
    b) Store data
    c) Access the internet
    d) Clean viruses
19. What is the shortcut key to copy in MS Word?
    a) Ctrl + V
    b) Ctrl + C
    c) Ctrl + X
    d) Ctrl + Z
20. Have you used any of the following platforms before?
    - SWAYAM
    - YouTube Learning
    - AYUSH Research Portal
    - NCISM Website
21. What is full form of PDF.
    a) Portable Document Format
    b) Public Document File
    c) Printable Data File
    d) Programmed Document Format
22. True or False: PubMed and DHARA are Ayurvedic e-resources.
    a) True
    b) False
    c) Only PubMed is Ayurvedic
    d) Only DHARA is Ayurvedic
23. What does BLS stand for? *(MCQ)*
    a) Basic Learning Session
    b) Basic Life Support
    c) Biology Life Science
    d) Basic Language Study
24. Which step mentioned below is one step in performing CPR.
    a) Placing the person in a recovery position immediately
    b) Giving the person food or water
    c) Performing chest compressions
    d) Checking their body temperature
25. What is meant by biomedical waste?
    a) Plastic waste
    b) Non-medical waste
    c) Waste from medical procedures
    d) All of the above
26. According to Ayurveda, what is the primary cause of disease in the human body?
    a) Genetic mutation
    b) Imbalance of doshas
    c) Lack of exercise
    d) Viral infection
27. Which of the following is considered the founder of Classical Yoga?
    a) Gautama Buddha
    b) Adi Shankaracharya
    c) Patanjali
    d) Swami Vivekananda
28. According to Ayurveda, what is the primary cause of disease in the human body?
    a) Genetic mutation

b) Imbalance of doshas
c) Lack of exercise
d) Viral infection

29. Which of the following herbs is commonly used in Ayurveda for improving memory and brain function?
    a) Ashwagandha
    b) Brahmi
    c) Amla
    d) Turmeric
30. NCISM is a statutory body constituted under which Act?
    a) Indian Medicine Central Council Act, 1970
    b) NCISM Act, 2020
    c) Indian Medical Council Act, 1956
    d) Ministry of AYUSH Act, 2014

Annexure 2

(Choose any eight from the given topics.)

Sl. no.	Contents	Teaching and learning methodology
1.	गीतम् –पठतुसंस्कृतम्, ममनाम--भवत: नामकिम्, भवत्या: नामकिम्, परस्परपरिचयः	Didactic with Video
2.	सः ,सा ,एषः, एषा, एतत्, अस्ति-नास्ति-सन्ति	Didactic with Video
3.	तत्र, अत्र, कुत्र, सर्वत्र, अन्यत्र, एकत्र्. With practical demonstration.	Didactic with Video
4.	कृपया, स्वागतम्, धन्यवादाः, क्षम्यताम्, अवश्यक्म्- पर्याप्तम्- मास्तु, सरलाःकथाः	Didactic with video
5.	संख्याप्रयोगः-१-१००	Didactic with chart
6.	writing and oral, समयपरिचयः	Didactic with chart
7.	दिनस्यपरिचय -प्रपरह्यः- परह्यः-ह्यः-अद्य-श्वः-परश्वः-प्रपरश्वः	Didactic and activity
8.	प्रश्नकरणम्,	Didactic and activity
9.	Discussion on previous topics, अभिनय -above all contents will be practiced to the students with conversation method.	Group activity and conversation
10.	पुरत-पृष्ठतः, वामतः- दक्षिणतः उपरि-अधः, अन्तः –बहिः सहायेनवाक्यप्रयोग	Didactic with video
11.	वर्तमानरूप-अस्ति-सन्ति , भूतकाल - भविष्यत्कालरूपाणि	Didactic with video
12.	यदि - तर्हि, च-एव-इति-अपि, त – पर्यन्तं सह-बिना, विरुद्धार्थकशब्दा उन्नत- वामन- पुरातन- नूतन- वृहत- लघुदीर्घ- ह्रस्व- स्थूल- कृशअधिकम-किचितं	Didactic with video
13.	षष्टीविभक्तिः, वैद्य-रोगी-सम्भाषणम्	Didactic with chart
14.	Discussion on previous topics, अकभनय-above all contents will be practiced to the students with conversation method.	Group activity and conversation
15.	शरीरस्यअवयवानांपरिचय,	Didactic
16.	क्त्वाप्रत्यय, तुमन्ताव्यय, अनियप्रर्यत्यय, तरप्-तमप्	Didactic
17.	किल बहुशः चित्त, द्वयम्, संख्यासुलिंगभेदः, संख्यानवेषणम्	Didactic and practical
18.	विशेषण -विशेषभावस्यअभ्यासः, बन्धुवाचकशब्दाः	Didactic and practical
19.	Discussion on previous topics, अकभनय-above all contents will be practiced to the students with conversation method.	Group activity and conversation
20.	Samaropanam	Stage Function

COURSE CURRICULUM FOR FIRST PROFESSIONAL BAMS
(PRESCRIBED BY NCISM)



SAMSKRITAM EVAM AYURVED ITHIHAS
(SUBJECT CODE-AyUG-SN & AI)`
SANSKRIT AND HISTORY OF AYURVEDA
(Applicable from 2021-22 batch onwards for 5 years or until further notification by NCISM, whichever is earlier)

ncism
प्राणाभिसरः प्राणायतनानाम्

BOARD OF AYURVEDA
NATIONAL COMMISSION FOR INDIAN SYSTEM OF MEDICINE
NEW DELHI-110058

SCAN ME
Sanskritam

NCISM
I professional Ayurvedacharya
(BAMS)

SAMSKRITAM EVAM AYURVED ITHIHAS
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Summary

AyUG-SN & AI Total number of Teaching hours: 300			
Lecture hours (LH) – Theory		**100 Hours**	**100 Hours (LH)**
Paper I	50 Hours		
Paper II (Sanskrit 40+ AI 10)	50 Hours		
Non-Lecture hours (NLH) – Theory		**140 Hours**	**200 Hours (NLH)**
Paper I	74 Hours		
Paper II (Sanskrit 46+ AI 20)	66 Hours		
Non-Lecture hours (NLH) – Practical		**60 Hours**	

Examination (Papers & Mark Distribution)					
Item	**Theory Component Marks AyUG-SN & AI**	**Practical Component Marks**			
		Practical	**Viva**	**Elective**	**IA**
Paper I	**100** Sanskrit 100 Marks	**--**	**75***	**10 (Set-FA)**	**15**
Paper II	**100** Sanskrit 80 Marks and Ayurved Itihas 20 Marks				
Sub-Total	**200**	**100**			
Total marks	**300**				
	*Viva voce examination shall be for Sanskrit and not for Ayurved Ithihasa				

Preface

Sanskrit is an ancient still most scientific language of India. The ancient literature created about various subjects in this region is in Sanskrit. The richness of Sanskrit language is accepted by intellectuals across the world. The literature of Ayurveda is also found in Sanskrit. Without understanding the language of the science, it is really hard to read and understand the terminologies, theories, principles of the science given in the Samhitas. Many of the students coming for the course partly introduced or not at all introduced to the Sanskrit language previously. Hence for understanding Ayurveda in its originality, Sanskrit is one of subject in First year BAMS curriculum. Similar to any language Listening, Reading, Writing and Speaking are the four pillars of a sanskrit. Reading, writing and understanding samhitas will be emphasized and listening and speaking can give confidence to the student and enhance the study.

Learning a language just by studying the theory is not enough hence curriculum of Sanskrit is designed by combining traditional Sanskrit teaching with new teaching health science education technologies.

This changed curriculum involves many new teaching learning techniques and assessment methods. Based on the course outcomes, curriculum is devided in papers. Importantent objectives are appropriately planned as per domains of learning. Supported by interactive methods of teaching and learning by using Audio-visual aids. There will be practicals and demonstrations based on Language Lab activities for enhancement of practical use of Sanskrit. Practicals can give a chance of acquiring skills by practice of use of Sanskrit in Samhitadhyayan. Application of learned Sanskrit will be practically ensured by reading newly introduced Ashtang Hrudayam. Students can experience of application of Sanskrit Grammer in Samhitadhyayan. Introduction to Niruktis, dictionaries and Shabdakoshas can motivate students to derive and understand meanings from Sanskrit verses on their own. As this is a language, learning to communicate in this language is very much essential. Addition of Sanskrit communication as a part of curriculum is for overcoming the fear of learning a new language.

History of Ayurved is also added in second part of the Sanskrit. As an ancient science, its gradual development. Important milestones, different Schools of thoughts, impotant traditions, followers in traditions, thier contribution etc will be introduced in History. Contribution of Scholars of modern era, Important institutes and globalization are few more points for history. Activity based learning and objective assessment are the most important changes to change perception towards study of history.

Index

Course Code and Name of Course 5
AyUG SN & AI 5
Table 1- Course learning outcomes and matched PO. 5
Sanskrit 5
Ayurved Itihas 5
Table 2 : Contents of Course AyUG SN & AI 6
Paper I Sanskrit 6
Paper II – Part A Sanskrit 9
Paper II – Part B – Ayurved Itihas 11
Table 3: Learning objectives (Theory) of Course AyUG-SN & AI 13
Paper I – Sanskrit 13
Paper II Part A - Sanskrit Learning Objective 23
PAPER II Part B Ayurved Itihas 26
List of Practicals 34
Table 4: Learning objectives (Practical) of AyUG- SN & AI 35
Sanskrit Practical 35
Table 5: Non Lecture Activities Course AyUG- SN & AI 38
Ayurved Itihas- 38
Table 6: Assessment Summary 39
6 A-Number of Papers and Marks Distribution 39
6 B - Scheme of Assessment (formative and Summative) 39
6 C - Calculation Method for Internal assessment Marks (15 Marks) 39
6 D- Evaluation Methods for Periodical Assessment 40
6 E- Paper Layout 41
PAPER-I 41
PAPER-II 41
6 F- Disribution of Theory Exam 42
Paper I: Sanskrit 42
Paper II 46
Part A Sanskrit 46
Part B 47
6 G- Question paper blue print 47
Paper I – Sanskrit 47
Paper II – Sanskrit and Ayurved Itihas 48
6 H - Distribution of Practical Exam 50
7. References/ Resourses 51
Sanskrit 51
Ayurved Itihas 52

Course Code and Name of Course

	Course code	Name of Course
	AyUG SN & AI	**Sanksrit and Ayurved Itihas**

AyUG SN & AI Course

Table 1- Course learning outcomes and matched PO.

SR1 CO No	A1 **Course learning Outcome (CO) AyUG SN & AI** **At the end of the course AyUG SN & AI, the student should be able to-**	B1 **Course learning outcomes matched with program learning outcomes.**
Sanskrit		
CO1	Read and recite Prose (गद्य:) and poem (पद्य:) with the appropriate accent (उच्चारणस्थानानि तथा बाह्याभ्यरप्रयत्नानि). उच्चारणस्थानानां बाह्याभ्यन्तरप्रयत्नानां च सहाय्येन पाठने तथा लेखने सामर्थ्यम् |	PO-5, PO-6, PO-7, PO-8, PO-9
CO 2	Apply various Technical Terms in Ayurveda (परिभाषाशब्दा:), Nouns & Pronouns (नामरूपाणि तथा सर्वनामरूपाणि), Verbs (धातुरूपाणि), suffixes (प्रत्यया:), Grammatical Terms (संज्ञा), Syntax (संधी) and Compounds (समासा:) from Sanskrit Grammar for enhanced interpretation of Ayurveda texts (आयुर्वेद संहिता:). परिभाषाशब्देषु नामरूपेषु सर्वनामरूपेषु क्रियापदेषु प्रत्ययेषु संज्ञासु सन्धिषु समासेषु च ज्ञानं तद्द्वाराआयुर्वेदसंहितासु अर्थावबोधनम् प्रायोगिकविज्ञानञ्च |	PO-5, PO-7, PO-9
CO 3	Discriminate and interpret the Cases & meanings (विभाक्त्यर्थ) used in various verses of Ayurveda texts (आयुर्वेद संहिता). कारकविभक्त्यर्थादिषु परिज्ञानं तथा आयुर्वेदसंहितासु तेषां प्रयोगपरिचयञ्च |	PO-5, PO-7, PO-9
CO 4	Formulate the Prose order (अन्वय:) of Slokas/Sutras in Ayurveda Textbooks (संहिता) to derive the meaning (वाच्यार्थ), to determine the Scientific Meaning (शास्त्रार्थ) and to Translate (Regional or other language). अन्वयलेखने वाच्यार्थावबोधने शास्त्रार्थावबोधने च सामर्थ्यं अनुवादनपाटवञ्च |	PO-5,PO-6, PO-7, PO-8, PO-9
CO 5	Interpret the Synonyms (पर्याया:) and Derivations (निरुक्ति) of Ayurveda Terms using samskrita dictionaries (संस्कृत शब्दकोश). कोशग्रन्थानां सहाय्येन आयुर्वेदे विद्यमानानां पदानां तेषां पर्यायानाञ्च निरुक्तिपूर्वक परिज्ञानं तेषां प्रयोगे परिचयञ्च |	PO-5, PO-7, PO-9
CO 6	Speak, Write and Summarize and Express in Samskrit (संस्कृतम्). संस्कृतभाषायां भाषणे लेखने सङ्क्षिप्य लिखने अर्थप्रकाशने च सामर्थ्यम् |	PO-5,PO-6, PO-7, PO-8, PO-9
CO 7	Develop the ethical responsibility towards the profession, society and human being. सामाजिक- औद्योकिक-मानुषिक धर्मबोधता	PO-6 & PO-8
Ayurved Itihas		
CO 8	Analyse and explain the important milestones in the history of Ayurveda	PO-1
CO 9	Appreciate the status of Ayurveda in different time periods and Contributions made by different Acharyas to Ayurveda.	PO-1

Table 2 : Contents of Course AyUG SN & AI

Sr No	A2 List of Topics AyUG-SN & AI Paper I	B2 Term	C2 Marks	D2 Lecture hours	E2 Non-Lecture hours
Paper I Sanskrit					
1	संस्कृतवर्णानाम् परिचयः – माहेश्वरसूत्राणि, उच्चारणस्थानानि, बाह्यप्रयत्नानि, अभ्यन्तर प्रयत्नानि	**I**	**05**	**3**	**10**
2	संज्ञा- **2.1** - संयोगः, संहिता, ह्रस्वदीर्घप्लुतः, अनुनासिकः, पदम्, धातुः, उपसर्गः, गुणः, वृद्धिः [विस्तरेण पाठनम् - Detailed teaching] **2.2 -** इत्, लोपः, प्रत्याहारः, उदात्तः, अनुदात्तः, स्वरितः, सवर्णः, निपातः, प्रगृह्यम्, [सङ्क्षिप्य पाठनम् – Brief teaching]	**2.1 – I** **2.2 – II**	**05**	**05**	**-**
3.	उपसर्गाः- उपसर्गाः क्रियायोगे प्र, परा, अप, सम्, अनु, अव, निस्, निर्, दुस्, दुर्, वि, आङ्, नि, अपि, अधि, अति, सु, उत्, अभि, प्रति, परि, उप |	**II**	**05**	**02**	**03**
4.	अव्ययानि **4.1 -** च अपि खलु हि तु किल ननु वा च एव **4.2-** पुनः विना उच्चैः ऋते एवम् सह सार्धम् युगपत् यथा –तथा यावत्-तावत् इति यदा-तदा यदि-तर्हि साकम् न कुत्र कति कुतः किमर्थम्, कियत् इह अत्र तत्र सर्वत्र अन्यत्र कुत्र एकत्र सदा अन्यथा एकथा [विस्तरेण पाठनम् - detailed teaching] A) Identify अव्ययानि B) Explain the meaning with reference to the context C) Construct the sentences using अव्ययानि	I A II B III C	**5**	**I -01** **II-01**	**I-0** **II-0** **III-03**
5.	कारकप्रकरणम् – कर्तृकारकम् , कर्मकारकम् , करणकारकम् , सम्प्रदानकारकम्, अपादान कारकम्, अधिकरणकारकम् , सम्बन्धः, उपपदविभक्तिः सूत्रसहितपाठनं परं परीक्षायां सूत्रव्याख्यानादि प्रश्नानि न प्रष्टव्यानि | A) Discriminate the विभक्ति and their meaning. B) Identify the karakas from Ayurveda texts like **करणम्** **कारणम्** C) Construct sentences D) Translate sentences from English to Sanskrit & from Sanskrit to English.	I A II B III C, D	**15**	**I- 05**	**II-05** **III-05**
6.	सन्धिः **6.1 -** अच् सन्धिः/स्वरसन्धिः - यण् सन्धि -इको यणचि, गुण सन्धिः=आद्गुणः वृद्धिसन्धिः-वृद्धिरेचि, अयवायाव सन्धिः - एचोऽयवायवः/वान्तो यि	**II**	**15**	**10**	**10**

	प्रत्यये, लोप सन्धि:-लोप: शाकल्यस्य, पररूपसन्धि:-एङि पररूपम्, पूर्वरूपसन्धि- एङ: पदान्तादति, प्रकृतीभाव- सर्वत्र विभाषा गोः , प्लुत प्रगृह्य अचि नित्यम् | **सूत्रसहितपाठनं परं परीक्षायां सूत्रव्याख्यानादि प्रश्नानि न प्रष्टव्यानि** | **6.2 -** हल्सन्धि: /व्यञ्जनसन्धि: - श्चुत्वसन्धि:- स्तो: श्चुना श्चु:, ष्टुत्वसन्धि:- ष्टुना ष्टु:, जश्त्व सन्धि:-झलां जशो/न्ते, अनुनासिकसन्धि:- यरोऽनुनासिकेऽनुनासिको वा/प्रत्यये भाषायां नित्यम्, परसवर्णसन्धि:-तोर्लि:/वा पदान्तस्य, चर्त्वसन्धि: खरि च, पूर्वसवर्णसन्धि:-झयोऽहोऽन्यतरस्याम्, छुत्वसन्धि: शश्छोऽटि/ छत्वममीति वाच्यम्, अनुस्वारसन्धि:- मोऽनुस्वार:, तुगागमसन्धि:- शि तुक्/छे च/पदान्ताद्वा, रुत्वआदेशसन्धि:-नश्छव्यप्रशान् **सूत्रसहितपाठनं परं परीक्षायां सूत्रव्याख्यानादि प्रश्नानि न प्रष्टव्यानि |** **6.3 -** विसर्गसन्धि: - रुत्वसन्धि:-ससजुषो रु:, उत्वसन्धि:-अतो रोरप्लुदादप्लुते/हशि च, रो रि, भो भागो अघो अपूर्वस्य योऽशि , रोऽसुपि , एतत्तदोः सुलोपोऽकोरनञ् समासे हलि, सोऽचि लोपे चेत् पादपूरणम् | सूत्रसहितपाठनं परं परीक्षायां सूत्रव्याख्यानादि प्रश्नानि न प्रष्टव्यानि | **6.4.-** रुत्वप्रकरणसन्धि:- [सङ्क्षिप्य पाठनम् – Brief teaching] सम: सुटि, कानाम्रेडिते च, अत्रानुनासिको पूर्वस्य तु वा,अनुनासिकात्परोऽनुस्वार:, खरवसानयोर्विसर्जनीय:, विसर्जनीयस्य स:,सम्पुङ्कानां सो वक्तत्च्व्य: |				
7.	**समास** **7.1 -** अव्ययीभावसमास: - **7.1.1 -** अव्ययम् विभक्तिसमीपसमृद्धिव्यर्ध्यर्थाभावात्ययसम्प्रतिशब्दप्रादुर्भावपश्चायथानुपूर्व्ययौगप द्यसादृउश्यसम्पत्तिसाकल्यान्तवचनेषु | **7.1.2. -** प्रथमा निर्दिष्टम् उपसर्जनम्,/ उपसर्जनं पूर्वम् /नाव्ययीभावादतो/ म् त्वपञ्चम्या:/ तृतीयासप्तम्योर् बहुलम्/अव्ययीभावे चाकाले | **7.2. -** तत्पुरुष समास: - द्वितीया श्रितातीतपतितगतात्यस्तप्राप्तापन्नै:, तृतीया तत्कृतार्थेन गुणवचनेन, कर्तृकरणे कृता बहुलम्, चतुर्थी तदर्थार्थ बलिहितसुखरक्षितै:, पञ्चमीभयेन, षष्ठी, सप्तमीशौण्डै:, विशेषणं विशेष्येणबहुलम्, उपमानानि सामान्यवचनै:, नञ्, कर्मधारय, द्विगु:, उपपद तत्पुरुष **7.3 -** बहुव्रीहि समास: - अनेकमन्यपदार्थे **7.4 -** द्वन्त्वसमास: - चार्थे द्वन्द्व: सूत्रसहितपाठनं परं परीक्षायां सूत्रव्याख्यानादि प्रश्नानि न प्रष्टव्यानि |	**II**	**15**	**09**	**10**
8.	शब्दरूपणि **8.1 -** पुल्लिङ्ग:शब्दरूपाणि अकारान्त: - वात, वैद्य, रुग्ण, राम आदि इकारान्त: - अग्नि, मुनि आदि उकारान्त: - ऋतु, भानु गुरु आदि ऋकारान्त: - नृ, धातृ, पितृ आदि	**I**	**10**	**02**	**14**

	ओकारान्त: - गो आदि नकारान्त – श्लेश्मन्, रोगिन्, ज्ञानिन् आदि सकारान्त – चन्द्रमस् आदि तकारान्त – मरुत् आदि दकारान्त – सुहृद् आदि जकारान्त – भिषज्, आदि शकारान्त: - कीदृश्, एतादृश् आदि **8.2 -** स्त्रीलिङ्ग:शब्दरूपाणि आकारान्त: - बला, कला, स्थिरा, माला आदि इकारान्त: - सम्प्राप्ति, प्रकृति, मति आदि ईकारान्त: - धमनी, नदी आदि उकारान्त: - रज्जु, धेनु आदि ऊकारान्त: - वर्षाभू, वधू आदि ऋकारान्त: - मातृ आदि चकारान्त: - वाच् आदि तकारान्त: - योषित्, सरित् आदि दकारान्तः – परिषद् आदि जकारान्त: - स्रज् आदि सकारान्त: - जलौकस्, सुमनस् आदि षकारान्तः – प्रावृष् आदि **8.3 –** नपुंसकलिङ्ग शब्दरूपाणि अकारान्त: - पित्त, वन आदि उकारान्त: - अश्रु, मधु आदि इकारान्त: - अक्षि, अस्थि, वारि, दधि आदि ऋकारान्त: - ज्ञातृ, धातृ आदि नकारान्त: - वर्त्मन्, दण्डिन् आदि सकारान्त: - स्रोतस्, मनस् आदि षकारन्तः – सर्पिष्, आयुष् आदि तकारान्त: - शकृत्, जगत् आदि अष्टाङ्गहृदयसंहितायाम् विद्यमानानाम् अन्यानामपि समाननामरूपाणाम् परिचयकरणम् अभिलषणीयम् | प्रश्नपत्रे न प्रष्टव्यम् | **8.4 -** सर्वनामपदानि – अस्मद्, युष्मद्, तद्, एतद्, यद्, किम्, इदम् आदि				
9.	धातुरुपाणि – [विस्तरेण पाठनम्-detailed teaching] **9.1 -** परस्मैपदि - लट्/लृट्/लङ्/विधिलिङ्/लोट् भ्वादि गण - भू सत्तायाम्, क्षि क्षये, गमॢ(गम्) गतौ, पा पाने, जीव्, पच्, त्यज्, दृश् (पश्य) अदादि गण - अद् भक्षणे , हन् हिम्सागत्यो:, वा गतिगन्धनयो: पा रक्षणे, अस्, श्वस्, स्वप्, ब्रू जुहोत्यादि गण- धा धारणपोषणयो:, पॄ - पलनपूरणयो:, हा त्यागे, दा (दाञ्) दिवादि गण- दिवु क्रीडादौ, त्रसी उद्वेगे, पुष् पुष्टौ, कुप्, नश्, तुष्, स्निह्, जॄ स्वादि गण- चिञ् चयने, शक्, श्रु तुदादि गण- तुद् व्यथने, कृष् विलेखने, लिख् लेखने, दिश्, कृन्त्, क्षिप्, स्पृश्	**I**	**10**	**05**	**05**

	रुधादि गण- रुधिर् आवरणे, भिदिर् विदारणे, भुज् तनादि गण- तनु विस्तारे, कृञ् करणे क्र्यादि गण- प्रीञ् -तर्पणे कान्ते च, ग्रह् उपादाने, ज्ञा चुरादि गण- गण् संस्थाने, साध्, ताड्, धृ, कथ् वाक्यप्रबन्धे आत्मनेपदि- भ्वादि गण - वृतु वर्त्तने, वृध्(वर्ध्), लभ्, सेव्, रुच् अदादि गण - शीङ् स्वप्ने, ब्रू जुहोत्यादि गण- धा धारणपोषणयो:, दा (दाञ्), दिवादि गण- जनी प्रादुर्भाव, मन्, बुध्, पद्, विद् स्वादि गण- चिञ् चयने, तुदादि गण- तुद् व्यथने, कृष् विलेखने, म्रि, विद्, मुच्, सिञ्च्, रुधादि गण- रुधिर् आवरणे, भिदिर् विदारणे, भुज् तनादि गण- तनु विस्तारे, कृञ् करणे क्र्यादि गण- प्रीञ् -तर्पणे कान्ते च, ग्रह् उपादाने, ज्ञा चुरादि गण- चुर्, क्षाल्, कथ्, घोष्, भक्ष् आयुर्वेदसंहितासु विद्यमानानां धतुरूपाणां परिचयीकरणम् अभिकाम्यम् **9.2 -** लृड्ग , आशीर्लिङ्ग, लिट , लुङ्ग, लुड [सङ्क्षिप्य पाठनम्-Brief teaching] भ्वादि गण, अदादि गण, जुहोत्यादि गण, दिवादि गण, स्वादि गण, तुदादि गण, रुधादि गण, तनादि गण, क्र्यादि गण, चुरादि गण पूर्वोक्तधातुष्वेकस्य पञ्चलकारेषु रूपाणि दर्शयेत् | परं परीक्षायाम् न पृष्टव्यानि |				
10.	प्रत्ययाः **10.1** – क्त - क्तवत्, तव्यत् – अनीयर्, शतृ – शानच्, ल्युट् - ण्वुल्, क्त्वा - ल्यप्, णिनि:, क्तिन्, तुमुन् प्रत्ययाणाम् प्रयोगा: एव पृष्टव्या: | **10.2 -** भावे घञ्, करणे घञ्, भावे ष्यञ्, कर्मणि ण्यत्, कर्त्तरि अच् अप् आयुर्वेदसंहितायां विद्यमानानां भावे/करणे/कर्त्तरि/ताच्छील्ये/ आदि प्रत्ययानां परिचय: करणीय: | परं परीक्षायाम् न पृष्टव्या: | परीक्षायाम् वाच्य प्रयोग: स्वरुपे पृष्टव्य: |	**II**	**10**	**05**	**6**
11	विशेषण विशेष्य	**II**	**05**	**02**	**03**

Paper II – Part A Sanskrit					
	A2 **List of Topics** **(Maximum Marks – 80 (SAQ & LAQ only)**	**B2** **Term**	**C2** **Marks**	**D2** **Lecture hours**	**E2** **Non-Lecture hours**
1	निरुक्ति तथा पर्याय पदानि– A) आयु:, शरीर, मन:, अग्नि:, जलम्, वात:, पित्तम्, कफ: B) रस, रक्त, मांस, मेद, अस्थि, मज्जा, शुक्र, इन्द्रियम्,श्रोत्र:, चक्षु:, रसना ,, घ्राण C)) धी, धृति, स्मृति,बुद्धी, मति , प्रज्ञा , मूत्र, पुरीष:, स्वेद, आत्मा, रोग:,निदानम्,	A- **I** B – **II** **C- III**	**15**	**7** **(A-1, B-3, C-3)**	**13** **(A- 4, B-4, C-5)**

	रोगि:, भेषजचिकित्सा , आदि				
2	परिभाषापदानि – A) आयुर्वेद:, पञ्चमहाभूतानि, त्रिगुणम्, दोषा:, मला:, दूष्यम्, सम्सर्ग:, सन्निपात: B) द्रव्य ,गुण, कर्म ,सामान्य, विशेष, गुरु, लघु, प्रकृति:, विकृति:,चय:, प्रकोप:, प्रसर:, स्थानसम्श्रय:, दोषगति: भेद:, रस:, वीर्यम्, विपाक:, कार्यकारणभाव: **C)** स्रोतस् , कोष्ठ:, आमम्, विरुद्धान्नम्, विरुद्धाहार:, विदाहि, विष्टम्भि, सात्म्यम्, ओकसात्म्यम्, देशसात्म्यम्, अत्यशनम्, अध्यशनम्, स्थानी, योगवाही, पथ्यम्, अपथ्यम्, कृतान्नवर्ग:, अवस्थापाक:, वेग:, शोधन, शमन, लंघन, बृहण, अनुपान आदि	A - **I** B **- II** **C- III**	**20**	**10** **(A-2, B-4, C- 4)**	**15** **(A- 5, B-5, C-5)**
3.	अन्वयलेखनम् - A) अष्टाङ्गहृदयम् सूत्रस्थानम् **- अध्याय: सर्वाणि सूत्राणि** १.आयुष्कामीयम् २.दिनचर्या ३.रोगानुत्पादनीयम् **B)** अष्टाङ्गहृदयम् सूत्रस्थानम् **- अध्याय: सर्वाणि सूत्राणि** दोषादिविज्ञानीयम् दोषभेदीयम् दोषोपक्रमणीयम् द्विविधोपक्रमणीयम् C) वैद्यकीय सुभाषितसाहित्यम् **- shloka numbers – (**भास्कर गोविन्द घाणेकर लिखित, चौखम्बा प्रकाशन) प्रथम: 1, 2 द्वितीय: 1, 7 तृतीय: 9 चतुर्थ: 2, 3 पञ्चम: 2, 3 षष्ठ: 1, 4, 7 सप्तम: 2, 5, 17 अष्टम: 13, 12 नवम: 12, 13 दशम: 1, 19 एकादश: 1, 2 द्वादश: 1, 6 त्रयोदश: 1, 7, 8, 9	A - **I** B - **II** C - **III**	**30**	**20** **(A- 4, B- 8, C- 8)**	**14** **(A- 4, B- 5, C- 5)**

	चतुर्दश: 2, 3, 4 पञ्चदश: 7, 10 षोडश: 5, 6 सप्तदश: 1, 4 अष्टादश: 1, 2, 3 एकोनविंशति: 2, 3, 4 विंशति: , 12, 3, 4 श्लोकपूरणं न प्रष्टव्यम् परीक्षायाम्। पदच्छेदं विग्रहवाक्यम् अन्वय: वाक्यार्थं भावार्थं इत्यादय: एव प्रष्टव्या: ।				
4.	पञ्चतन्त्र-अपरीक्षितकारकम् ५ अध्याय कथा -१ नापितक्षपणक कथा कथा-२ नकुलीब्राह्मणी कथा कथा-३ चक्रधर कथा कथा-४ सिंहकारक मूर्खपण्डितकथा कथा-५ मूर्खपण्डित कथा श्लोकपूरणं तथा अन्वयलेखनं न प्रष्टव्ये।	**III**	**15**	**03**	**04**

Paper II – Part B – Ayurved Itihas –					
	A2 **List of Topics AyUG SN & AI** **(Maximum Marks – 20 (MCQ only)**	**B2** **Term**	**C2** **Marks**	**D2** **Lecture hours**	**E2** **Non-Lecture hours**
1	Derivation (Vyutpatti and Niruktti) and definition of Itihasa. Necessity, Significance and Utility of knowledge of Ayurveda itihasa. Means and method of study of Ayurveda itihasa. Different Time periods relevant for the Study of Ayurveda itihasa (viz, Prevedic, Vedic, Samhita kala, Sangraha kala etc.)	**I**	**5**	1	2
2	Origin and lineage of Ayurveda (Ayurvedavatarana) and Introduction of references of Ayurveda in Veda, Upanishat and Puarana.	**I**		1	2
3	Structure, Specialities, Time period of Ayurveda Samhitas and their commentaries (including Special contributions of authors and commentators): Charaka Samhita, Sushruta Samhita, Ashtanga Sangraha, Ashtanga Hridaya, Bhela Samhita, Hareeta Samhita, Kashyapa Samhita.	**I**	**5**	2	2

4	Structure, Contributions and importance of Laghutrayee and Commentaries: Madhava Nidana, Sharngadhara Samhita, Bhavaprakasha.	**II**		1	3
5	Origin and period of different systems of medicine in the world.	**II**	**5**	1	2
6	Introduction to Vrukshayurveda, Hastyayurveda and Ashwayurveda. (Included in Transitional Curriculum)	**II**		-	1
7	Status of Ayurveda during the period of Ashoka, Mughal and British rule.	**II**		1	2
8	Contribution of Scholars of modern era: Acharya Gana Nath Sen, Vaidya Yamini Bhushan Rai, Vaidya Shankar Dajishastri Pade, Acharya Swami Lakshmiram, Acharya Yadavji Tikramji, Dr. PM. Mehta, Vaidya B G Ghanekar, Vaidya Damodar Sharma Gaur, Acharya Priyavrat Sharma, Vaidya C Dwarakanath, Vaidya K R Shrikantamurthy, Vaidya VJ Thakkar, Vaidyaratnam PS Varier, Vaidya B V Gokhale.	**III**	**5**	1	2
9	Globalization of Ayurveda	**III**		1	2
10	1)Developmental activities in Ayurveda in the post-independence period: • Introduction to various committees and their recommendations • Introduction of activities of the following Organizations : Department of AYUSH, CCIM/ NCISM, CCRAS, 2) National institutions Viz- All India Institute of Ayurved (AIIA), National Institute of Ayurveda, Jaipur. ITRA, Jamnagar. Faculty of Ayurveda, BHU, Varanasi. Rashtriya Ayurveda Vidyapeetha, New Delhi.	**III**		1	2

Table 3: Learning objectives (Theory) of Course AyUG-SN & AI

Paper I – Sanskrit									
A3 Course outcome	**B3 Learning Objective (At the end of the session, the Students should be able to)**	**C3 Domain/sub**	**D3 Must to know/ desirable to know/Nice to know**	**E3 Level Does/ Shows how/ Knows how/ Know**	**F3 T-L method**	**G3 Assessment**	**H3 Formative /summative**	**I3 Term**	**J3 Integration**
Topic 1- संस्कृतवर्णानाम् परिचयः **(5** marks) **Time: 13 hrs** (Lecture:- **3** hours Non lecture**10** hrs)									
CO 1, CO 6	Read & write Sanskrit words	Cognitive domain - Knowledge	Must know	Khows how .	Practical classes Demonstrations Classroom reading	Oral Written	F&S	I	
CO 1, CO 6	Pronounce Sanskrit as per their appropriate articulations	Cognitive domain – Comprehension	Must know	Khows how/ Shows how	1) Practical classes 2) presentation of videos 3) Graphical Representation of Vocal system Class room reading / speaking	Oral / Written Assignment on Identifying the Places of articulation of the words in Ayurveda texts.	F&S	I	
Topic 2- संज्ञा **(10 marks)- Time:** 05 **Hrs (Lecture:-** 5 **hours Non lecture** 00 **hrs)**									
CO 2, CO 4, CO	2.1 Explain the terms related to संज्ञा in Sanskrit grammar	Cognitive domain- Comprehension	Desirable to know	Knows	Lecture with Power point presentation	Oral, Conduction of quiz	F&S	II	
CO 2, CO 4, CO 5	2.2 Identify the संज्ञा Explain the meaning of the संज्ञा	Cognitive domain- Comprehension	Must know	Khows how	Lecture with Power point presentation	Oral / written Very short answer Differentiate, identify, fill in the blanks etc	F&S	I	

						Preparation of MSQ (MCQ) Question-answer sessions			
Topic 3 **उपसर्ग: - उपसर्ग: क्रियायोगे (05** marks) Time: **05** Hrs (Lecture:- **02** hours Non lecture **03** hrs)									
CO 2, CO 4, CO 6	Identify the उपसर्ग: Explain the meaning of the words with उपसर्ग: Identify the difference in meaning according to the उपसर्ग:	Cognitive domain - Comprehension problem solving	Must know	Khows how	Lectures with Power point presentation. Problem Based Learning (PBL) Group Discussions	Oral & Written objective type very short answer compare differentiate etc, Assignments open book test	F&S	II	
Topic 4- अव्ययानि (05 **marks) Time:** 05 **Hrs (Lecture:-** 02 **hours Non lecture** 03 **hrs)**									
CO 2, CO 4, CO 6	4.1 Identify अव्ययानि	Cognitive domain - Comprehension	Must know	Knows	Lectures with Power point presentation. Group Discussions	Oral & Written. objective type very short answer - compare, differentiate Assignments on sentence construction, presentation by the students	F&S	I	
CO 2, CO 4, CO 6	4.2 Explain the meaning with reference to the context	Cognitive domain – Application	Must Know	Knows how	Lectures with Power point presentation. Group Discussions	Oral & Written objective type very short	F&S	II	

						answer / compare differentiate Assignments open book test			
CO 2, CO 4, CO 6	Construct the sentences using अव्ययानि	Cognitive domain - Synthesis	Must Know	Shows how	Lectures with Power point presentation. Group Discussions Conversation Sessions	Oral & Written Construct sentences with proper use of Avyayas. Use appropriate Avyayas. Very short answer Assignments on finding out the अव्ययानि used in the texts and explain their meaning with reference to the context. Open book test.	F&S	III	
Topic 5— कारकप्रकरणम् (15 **marks) Time:** 15 **Hrs (Lecture:-** 5 **hours Non lecture** 10 **hrs)**									
CO 3, CO 6	A) Discriminate the विभक्ति and their meaning. B) Identify the karakas from Ayurveda texts like **करणम् कारणम्** C) Construct sentences. D) Translate sentences from English to	Cognitive domain - Synthesis problem solving	Must know	Shows how	Lectures with Power point presentation. Group Discussions	Oral & Written objective type very short answer / compare differentiate /	F&S	A)– I B) – II C) – III D) - III	

	Sanskrit & from Sanskrit to English.					meaning with reference to the context etc Assignments on identification of the karakas used in the Ayurveda basic principle terms like **करणम्** **कारणम्.**			
Topic 6- सन्धिः (15 **marks) Time:** 20 **Hrs (Lecture:-** 10 **hours Non lecture** 10 **hrs)**									
CO 2, CO 6	6.1 Identify सन्धिः Explain the meaning of the context by splitting. Formulate the joined words while writing the sentences	Cognitive domain - Application and problem solving	Must know	Knows how	Lectures with Power point presentation. Group Discussions Classes by the students Ashtang hrudaya with the **सन्धिः**	Oral & Written Objective type, very short answer – compare, differentiate etc. Assignments to find the **सन्धिः** in Ashtangahruda ya Quiz on सन्धिः	F&S	II	
CO 2, CO 6	6.2 Identify सन्धिः Explain the meaning of	Cognitive domain - Application and problem solving	Must know	Khows how	Lectures with Power point presentation. Group Discussions	Oral & Written objective type very short	F&S	II	

	the context by splitting. Formulate the joined words while writing the sentences				Classes by the students Ashtang hrudaya with the सन्धि:	answer compare and differentiate Assignments to find the **सन्धि:** in Ashtangahruda ya Quiz on सन्धि: Preparation of charts, mindmaps etc.			
CO 2, CO 6	6.3 Identify सन्धि: Explain the meaning of the context by splitting. Formulate the joined words while writing the sentences	Cognitive domain - Application and problem solving	Must know	Khows how	Lectures with Power point presentation. Group Discussions Classes by the students Ashtang hrudaya with the सन्धि:	Oral & Written objective type very short answer Assignments to find the **सन्धि:** in Ashtang hrudaya Quiz on सन्धि: Preparation of charts, mindmaps etc.	F&S	II	
CO 2, CO 6	6.4 Identify सन्धि: Explain the meaning of the context by splitting.	Cognitive domain – Comprehens ion Application	Desirable to know	Knows	Lectures with Power point presentation.	Oral Preparation of charts, mindmaps etc.	F&S	II	

Topic 7- समास (15 **marks) Time:** 19 **Hrs. (Lecture:-** 09 **hours Non lecture** 10 **hrs)**									
CO 2	Identify समास: Discriminate between the सन्धि:and समास:	Cognitive domain - Comprehension	Must know	Knows	Lectures with Power point presentation. Group Discussions Problem Based Learning(PBL) Flipped classroom Peer learning Classes by the students on the sutras in Ashtang hrudaya with the विग्रहवाक्यम्	Oral & Written objective type very short answer- compare differentiate Assignments to find the समास: in Ashtanga hrudaya Quiz on समास: Puzzles Word cloud Cross words etc.	F&S	II	
CO 2, CO 6	7.1 Identify समास: Explain the meaning of the context by writing the विग्रहवाक्यम् Construct the समस्तपदम्while writing the sentences	Cognitive domain - Application and problem solving	Must know	Shows how	Lectures with Power point presentation. Group Discussions Problem Based Learning(PBL) Flipped classroom Peer learning Classes by the students on the sutras in Ashtang hrudaya with the विग्रहवाक्यम्	Oral & Written objective type very short answer Assignments to find the समास: in Ashtangahrday a Quiz on समास: Puzzles Word cloud Cross words	F&S	II	

						etc. Preparation of charts, mindmaps etc.			
CO 2, CO 6	7.2 Identify समास: Explaining the meaning of the context by writing the विग्रहवाक्यम् Construct the समस्तपदम् while writing the sentences	Cognitive domain - Application and problem solving	Must know	Shows how	Lectures with Power point presentation. Group Discussions Problem Based Learning(PBL) Flipped classroom Peer learning Classes by the students on the sutras in Ashtang hrudaya with the विग्रहवाक्यम्	Oral & Written objective type very short answer Assignments to find the समास: in Ashtangahrdaya Quiz on समास: Puzzles Word cloud Cross words etc. Preparation of charts, mindmaps etc.	F&S	II	
CO 2, CO 6	7.3 Identify समास: Explaining the meaning of the context by writing the विग्रहवाक्यम् Construct the समस्तपदम्while writing the sentences	Cognitive domain - Application and problem solving	Must know	Shows how	Lectures with Power point presentation. Group Discussions Problem Based Learning(PBL) Flipped classroom Peer learning Classes by the students on the sutras in Ashtang hrudaya with the विग्रहवाक्यम्	Oral & Written objective type very short answer meaning with reference to the context etc. Assignments to find the समास: in Ashtangahrday	F&S	II	

						a Quiz on समास: Puzzles Word cloud Cross words etc. Preparation of charts, mindmaps etc.			
CO 2, CO 6	7.4 Identify समास: Explaining the meaning of the context by writing the विग्रहवाक्यम् Construct the समस्तपदम् while writing the sentences	Cognitive domain - Application and problem solving	Must know	Shows how	Lectures with Power point presentation. Group Discussions Flipped classroom Peer learning Classes by the students on the sutras in Ashtang hrudaya with the विग्रहवाक्यम् Problem Based Learning(PBL)	Oral & Written objective type very short answer Assignments to find the समास: in Ashtangahrday a Quiz on समास: Puzzles Word cloud Cross words etc. Preparation of charts, mindmaps etc.	F&S	II	
Topic 8- शब्दरूपाणि (10 **marks) Time:** 16 **Hrs (Lecture:-** 2 **hours Non lecture** 14 **hrs)**									
CO 2, CO 3, CO 6	Identify & write the अन्तलिङ्गविभक्तिवचनानि of a noun. Construct sentences	Cognitive domain – Synthesis problem solving	Must know	Shows how	Lectures with Power point presentation. Recitation Peer learning	Oral & Written objective type very short answer	F&S	I	

					Group Discussions	Assignments to find out the अन्तलिङ्गविभक्तिवचनानि of nouns used in various text books and writing all forms of all विभक्ति. Quizzes Puzzles Word cloud Cross words etc.			
Topic 9- धातुरुपाणि (10 **marks) Time:** 10**Hrs. (Lecture:-** 5 **hours Non lecture** 05 **hrs)**									
CO 2, CO 6	9.1 Identify & write लकारपदपुरुषवचनानि of the roots. Interpret the meaning according to the लकार: Use for constructing sentences.	Cognitive domain - Synthesis and problem solving	Must know	Shows how	Lectures with Power point presentation. Recitation Group Discussions Peer learning	Oral & Written objective type very short answer Assignments to find out the verbs used in various text book in the syllabus and completing all the forms. Quizzes Word cloud etc.	F&S	I	
CO 2, CO 6	9.2 Identify & write लकारपदपुरुषवचनानि of the roots.	Cognitive domain- Comprehension problem	Nice to know	Knows	Lectures with Power point presentation. Group Discussions	Oral Assignments Quizzes Word cloud etc.	F&S	I	

	Interpret the meaning according to the लकार:	solving							
Topic -10 प्रत्ययाः (10 **Marks) Time:** 11 **Hrs (Lecture:-** 5 **hours Non lecture** 06 **hrs)**									
CO 2, CO 6	10.1 Identify the प्रत्यया: Interpret the meaning with reference to the context with the support of the प्रत्यया:	Cognitive domain - Comprehension and problem solving	Must know	Shows how	Lectures with Power point presentation. Group Discussions	Oral & Written objective type very short answer Assignments Quizzes	F&S	II	
CO 2, CO 6	10.2 Identify the प्रत्यया: Interpret the meaning with reference to the context with the support of the प्रत्यया: (परीक्षायाम् वाच्य प्रयोग: स्वरुपे पृष्टव्य: |)	Cognitive domain- Application and problem solving	Must to Know	Shows how	Lectures with Power point presentation. Group Discussions	Oral Assignments Quizzes	F&S	II	
Topic 11- विशेषण विशेष्य (05 **Marks) Time:** 05 **Hrs (Lecture:-**02 **hours Non lecture** 03 **hrs)**									
CO 2, CO 6	Identify and discriminate different types of Visheshanas. Effectively use visheshanas in sentences.	Cognitive domain - Application and problem solving	Must know	Knows how / Shows how	Lectures with Power point presentation. Flipped classroom	Oral & Written Quizzes Word cloud etc.	F&S	II	

Paper II Part A - Sanskrit Learning Objective									
A3 Course outcome	**B3 Learning Objective (At the end of the session, the Students should be able to)**	**C3 Domain/sub**	**D3 Must to know/ desirable to know/ Nice to know**	**E3 Level Does/ Shows how/ Knows how/ Know**	**F3 T-L method**	**G3 Assessment**	**H3 Formative /summative**	**I3 Term**	**J3 Integration**
Topic 1- निरुक्ति/ **Paryaya padani (15 marks) Time: 18 Hrs.** Lecture:- **7** hours **(A-2, B-5)** Non lecture **13 (A- 4, B-4, C-5** hrs**)**									
CO 2, CO 5	Explain the meaning of the words and their synonyms with the help of their nirukti (निरुक्तिः) A) आयुः ,शरीर, मनः, अग्नि,: जलम्, वातः, पित्तम्, कफः B) रस, रक्त, मांस, मेद, अस्थि, मज्जा, शुक्र , इन्द्रियम् ,श्रोत्र, चक्षु , ,रसना, घ्राण C) धी, धृति, स्मृति ,बुद्धी , ,मति प्रज्ञा ,मूत्र ,पुरीषः, स्वेद, आत्मा, रोगः,निदानम् ,रोगि ,: भेषजचिकित्सा , आदि	Cognitive domain - comprehension	Must know	Knows how	Lectures with Power point presentation. Flipped classroom Peer learning Ayurveda Samhita Group Discussions	Oral & Written objective type very short answer compare differentiate meanings meaning with reference to the context etc Assignments Open book test	F & S	A- **I** B – **II** **C- III**	Samhita, Kriya Shariir, Rachana Shariir.
Topic 2- परिभाषापदानि (20 **marks) Time** 25 **Hrs (Lecture:- 10 (A-2, B-4, C- 4 hours) Non lecture 15 (A- 5, B-5, C-5 hrs)**									

CO 2, CO 5	Explain the meaning of the words and their synonyms with the help of their nirukti (निरुक्तिः) Describe the Paribhasapadas (परिभाषापदः) परिभाषापदानि – A) आयुर्वेदः, पञ्चमहाभूतानि, त्रिगुणम्, दोषा,: मलाः, दूष्यम्, सम्सर्गः, सन्निपातः B) द्रव्य ,गुण, कर्म ,सामान्य, विशेष, गुरु, लघु, प्रकृतिः, विकृतिः,चयः, प्रकोपः, प्रसरः, स्थानसम्श्रयः, दोषगतिः भेदः, रसः, वीर्यम्, विपाकः, कार्यकारणभावः **C**) स्रोतस् , कोष्ठः, आमम्, विरुद्धाह्रम्, विरुद्धाहारः, विदाहि, विष्टम्भि, सात्म्यम्, ओकसात्म्यम्, देशसात्म्यम्, अत्यशनम्, अध्यशनम्, स्थानी, योगवाही, पथ्यम्, अपथ्यम्, कृतान्नवर्गः, अवस्थापाकः, वेगः ,शोधन ,शमन, लंघन , बृहण, अनुपान आदि	Cognitive domain – Comprehension Application	Must know	Knows how	Lectures with Power point presentation. Flipped classroom Peer learning Group Discussions	Oral & Written objective type very short answer write short notes Assignments from Ayurveda Samhita Open book test	F&S	A- **I** B – **II** **C- III**	Samhita, Kriya Shari r, Rachana Sharir.
Topic 3 - अन्वयलेखनम् (30 **marks) Time** 34 **Hrs (Lecture:-** 20 (**A-** 4**, B-** 8**, C-**8 **hours**) **Non lecture** 14 (**A-**4**, B-**5**, C-**5 **hrs)**									
CO 4, CO 6	Identify the subject object Adjective noun verb in a sentence.	Cognitive domain – Comprehension Application	Must know	Shows how	Self-directed learning Flipped classroom Classes by the students	Oral & Written Objective type Very short answer Anvaya writing	F&S	A - **I** B - **II** C- **III**	Samhita

	Write the पदच्छेदं विग्रहवाक्यम् अन्वय: वाच्यार्थं and भावार्थम् Of shlokas A) अष्टाङ्गहृदयम् सूत्रस्थानम् – अध्यायत: सर्वाणि सूत्राणि | १.आयुष्कामीयम् २.दिनचर्या ३.रोगानुत्पादनीयम् B) अष्टाङ्गहृदयम् सूत्रस्थानम् – अध्यायत: सर्वाणि सूत्राणि | दोषादिविज्ञानीयम् दोषभेदीयम् दोषोपक्रमणीयम् द्विविधोपक्रमणीयम् C) वैद्यकीय सुभाषितसाहित्यम् – shloka numbers - प्रथम: 1, 2 द्वितीय: 1, 7 तृतीय: 9 चतुर्थ: 2, 3 पञ्चम: 2, 3 षष्ठ: 1, 4, 7 सप्तम: 2, 5, 17 अष्टम: 13, 12 नवम: 12, 13 दशम: 1, 19 एकादश: 1, 2 द्वादश: 1, 6				Group Discussions	Short answer Assignments on writing पदच्छेदं विग्रहवाक्यम् अन्वय: वाच्यार्थं भावार्थम्			

	त्रयोदश: 1, 7, 8, 9 चतुर्दश: 2, 3, 4 पञ्चदश: 7, 10 षोडश: 5, 6 सप्तदश: 1, 4 अष्टादश: 1, 2, 3 एकोनविंशति: 2, 3, 4 विंशति: , 12, 3, 4								
Topic 4 - **पञ्चतन्त्र-अपरीक्षितकारकम् ५ अध्याय (1**5 marks) Time **07** Hrs (Lecture:- **03** hours Non lecture **04** hrs)									
CO 4, CO 6	Construct Sanskrit sentences and comprehend a passage. Convert active and passive voice sentences. १. क्षपणक कथा २. नकुलब्राह्मणी कथा ३. चक्रधर कथा ४.सिंहकारकब्राह्मणपुत्र कथा ५. मूर्खपण्डित कथा	Cognitive Domain-Synthesis Problem Solving	Must know	Shows how	Activity based learning Self-directed learning Flipped classroom Group Discussions	Oral & Written objective type very short answer write summery Assignments on finding out प्रत्यय: and क्रियापदानि Assignments of changing the voice. Assignments on translation	F&S	III	

PAPER II Part B Ayurved Itihas									
A3 Course outcome	B3 Learning Objective (At the end of the session, the students should be able to)	C3 Domain/sub	D3 Must to know/ desirable to know/Nice to know	E3 Level Does/ Shows how/ Knows how/ Know	F3 T-L method	G3 Assessment	H3 Formative /summative	I3 Term	J3 Integration

Topic 1- Time (Lecture:- 1 hour, Non lecture 2 hours)									
CO 8	Describe Etymological derivation (Vyutpatti), syntactical derivation (Niruktti) and definition of the word Itihasa.	Cognitive/ Knowledge(K)	Must know	Knows	Lecture & Group Discussion,	Written MCQ	F & S	I	
CO 8	Describe of knowledge of history, its significance and utility, means and method of Ayurveda history	Cognitive/ coprehension	Must know	Knows	Lecture & Group Discussion, Tutorial, Video clips	Written MCQ **Discussions or debate**	F	I	
CO 8 CO 9	Explain Different Time periods relevant for the Study of Ayurveda itihasa (viz, Prevedic, Vedic, Samhita kala, Sangraha kala etc.)	Cognitive/K	Must know	Knows	Lecture & Group Discussion, Tutorial, Charts, Edutainment.	Written MCQ	F & S	I	
Topic 2- Time (Lecture:- 1 hour, Non lecture 2 hours)									
CO 8 CO 9	Explain different opinions of origin and lineage of Ayurveda available in Samhitas and Samudra manthana and origin of Dhanvantari.	Cognitive/K	Must know	Knows	Lecture, video & Group Discussion	Written MCQ	F & S	I	
CO 8 CO 9	Outline 2-3 references of Ayurveda in Veda, Upanishat and Puarana	Cognitive/K	Desirable to know	Knows	Lecture, charts & Group Discussion, SDL	Written MCQ, **Online search of Archiological sites for Ayurved. Presentation by Students,**	F	I	

CO 8	Describe Ayurveda as Upaveda of Atharvaveda	Cognitive/coprehention	Desirable to know	Knows	Lecture & Group Discussion	Written MCQ	F & S	I	
Topic 3- Time (Lecture:- 2 hour, Non lecture 2 hours)									
CO 8 CO 9	Describe the Structure, Specialities, Time period of Charaka Samhita	Cognitive/K	Must know	Knows	Lecture, charts & Group Discussion Online Visit of Charakaranya, elared places.	Written MCQ **Chart prepration**	F & S	I	
CO 8 CO 9	Briefly explain contribution of Punarvasu Athreya, Agnivesha, Charaka, Drudhabala	Cognitive/K	Must know	Knows	Lecture & Group Discussion	Written MCQ	F & S	I	
CO 8 CO 9	Enumerate the important Commentaries on Charaka Samhita and identify their authors.	Cognitive/K	Must know	Knows	Lecture & Group Discussion, Activity on commentary, Compilation.	Written MCQ **Online samhitas, Commentory search**	F & S	I	
CO 8 CO 9	Explain the importance of Ayurveda Deepika, Jalpakalpataru.	Cognitive/K	Must know	Knows	Lecture & Group Discussion.	Written MCQ	F & S	I	
CO 8 CO 9	Justify Charakastu Chikitsite in view of Global medical history.	Cognitive/K	Must know	Knows	Lecture & Group Discussion,	Written MCQ **Debate Creativs writing**	F	I	Roganidana, Kayachikitsa
CO 8 CO 9	Describe the Structure, Specialities, Time period of Sushruta Samhita	Cognitive/K	Must know	Knows	Lecture & Group Discussion	Written MCQ Poster making	F & S	I	
CO 8 CO 9	Briefly explain contribution of Dhanvantari, Sushruta,	Cognitive/k	Must know	Knows	Lecture & Group Discussion	Written MCQ	F & S	I	Salya tantra

	Nagarjuna, Chandrata								
CO 8 CO 9	Enumerate the important commentaries on Sushruta Samhita and identify their authors.	Cognitive/K	Must know	Knows	Lecture & Group Discussion	Written MCQ **Chart or collage**	F & S	I	
CO 8 CO 9	Explain the importance of Nibandha sangraha, Nyaya chandrika,	Cognitive/K	Must know	Knows	Lecture & Group Discussion	Written MCQ	F & S	I	
CO 8 CO 9	Justify Shaareere Sushruta	Cognitive/comprehension	Must know	Knows	Lecture & Group Discussion	Written MCQ Debate/Discussions	F	I	Rachana Sharira, Kriya sharira
CO 8 CO 9	Describe the Contributions of Sushruta Samhita to the field of surgery.	Cognitive/ Comprehension	Must know	Knows	Lecture & Group Discussion	Written MCQ	F & S	I	Shalya Tantra
CO 8 CO 9	Identify the acharyas of Atreya and Dhanvantari Sampradaya	Cognitive/K	Must know	Knows	Lecture & Group Discussion Quiz	Written MCQ	F & S	I	
CO 8 CO 9	Describe the Structure, Specialities, Time period of Ahtanga sangraha and Ashtang hridaya.	Cognitive/K	Must know	Knows	Lecture & Group Discussion Video Clips	Written MCQ Chart or collage of events	F & S	I	
CO 8 CO 9	Briefly explain contributions of Vruddha and Laghuvagbhata	Cognitive/K	Must know	Knows	Lecture & Group Discussion	Written MCQ	F & S	I	
CO 8 CO 9	Enumerate commentaries on Ahtanga sangraha and Ashtang hridaya and explain importance of Indu, Hemadri and Arunadatta commentary.	Cognitive/K	Must know	Knows	Lecture & Group Discussion	Written MCQ Quiz	F & S	I	
CO 8	Justify Sutrasthane tu	Cognitiv	Must know	Knows	Lecture & Group	Written	F & S	I	

CO 9	vagbhata	e/K			Discussion	MCQ			
CO 8 CO 9	Enumerate the salient features of Bhela Samhita	Cognitive/k	Desirable to know	Knows	Lecture & Group Discussion, SDL	Written MCQ	F	I	
CO 8 CO 9	Enumerate the salient features of Hareeta Samhita	Cognitive/k	Desirable to know	Knows	Lecture & Group Discussion, SDL	Written MCQ	F & S	I	
CO 8 CO 9	Describe the Structure, Specialties, Time period of Kashyapa Samhita	Cognitive/k	Must know	Knows	Lecture & Group Discussion	Written MCQ Chart or collage of Events	F & S	I	
CO 8 CO 9	Briefly explain contribution of Kashyapa, Jeevaka, Vatsya.	Cognitive/k	Must know	Knows	Lecture & Group Discussion	Written MCQ	F & S	I	
CO 8 CO 9	Identify contribution of Kashyapa Samhita to the field of Pediatrics.	Cognitive/k	Must know	Knows	Lecture & Group Discussion	Written MCQ	F & S	I	
Topic 4- Time (Lecture:- 1 hour, Non lecture 3 hours)									
CO 8 CO 9	Describe Structure, Contributions and importance of Madhava Nidana.	Cognitive/k	Must know	Knows	Lecture & Group Discussion, Library Session for handing of books.	Written MCQ Library Searching **online availabe Samhitas. Samhita mobile applications**	F & S	II	
CO 8 CO 9	Outline the importance of Madhavakara, Vijayarakshita, Shrikanthadatta and Justify nidane madhava shreshtha.	Cognitive/k	Must know	Knows	Lecture & Group Discussion	Written MCQ	F & S	II	Roganidana
CO 8	Describe Structure,	Cognitiv	Must know	Knows	Lecture & Group	Written	F & S	II	

CO 9	Contributions and importance of Sharngadhara Samhita.	e/k			Discussion	MCQ			
CO 8 CO 9	Briefly explain contribution of Sharngadhara, Adhamalla, Kashiram.	Cognitive/k	Must know	Knows	Lecture & Group Discussion	Written MCQ	F & S	II	
CO 8 CO 9	Explain about Bhavamishra and Enumerate the salient features of Bhavaprakasha.	Cognitive/k	Must know	Knows	Lecture & Group Discussion,	Written MCQ	F & S	II	
Topic 5- Time (Lecture:- 1 hour, Non lecture 2 hours)									
CO 8 CO 9	Enlist origin and period of different systems of medicine in the world.	Cognitive/k	Must know	Knows	Lecture & Group Discussion	Written MCQ Assignments	F & S	II	
Topic 6- Time (Lecture:- 0 hour, Non lecture 1 hours)									
CO 8 CO 9	Explain in brief about Ashwayurveda, Gajayuyrveda, Gavayurveda and Vrukshayurveda.	Cognitive/k	Must know	Knows	Lecture (Included in Transitional Curriculum)& Group Discussion	Written MCQ Serach of Use of Ayurved plats in different cattle food. Poster making	F & S	II	
Topic 7- Time (Lecture:- 1 hour, Non lecture 2 hours)									
CO 8 CO 9	Describe the Status of Ayurveda during the period of Ashoka, Mughal and British rule.	Cognitive/K	Desirable to know	Knows	Lecture & Group Discussion, SDL	Written MCQ Collect the photos online and make a documentor	F & S	II	

						y in your voice.			
Topic 8- Time (Lecture:- 1 hour, Non lecture 2 hours)									
CO 8 CO 9	Name the Contributions of Acharya Gana Nath Sen, Vaidya Yamini Bhushan Rai, Vaidya Shankar Dajishastri Pade, Acharya Swami Lakshmiram, Acharya Yadavji Tikramji, Dr. PM. Mehta, Vaidya B G Ghanekar, Vaidya Damodar Sharma Gaur, Acharya Priyavrat Sharma, Vaidya C Dwarakanath, Vaidya K R Shrikantamurthy, Vaidya VJ Thakkar, Vaidyaratnam PS Varier, Vaidya B V Gokhale.	Cognitive/K	Desirable to know	Knows	Lecture & Group Discussion, Tutorial, Self directed learning (SDL)	Written MCQ, Quiz, Match the pair Edutainment Poster making, Video clip making, Compilation,	F & S	III	
Topic 9- Time (Lecture:- 1 hour, Non lecture 2 hours)									
CO 8 CO 9	Discuss Globalization of Ayurveda – Expansion of Ayurveda in Misra (Egypt), Sri Lanka, Nepal other nations.	Cognitive/K	Desirable to know	Knows	Lecture & Tutorial, Video Edutainment	Written MCQ Collect data and make video clip with your own narration.	F & S	III	
Topic 10- Time (Lecture:- 1 hour, Non lecture 2 hours)									

CO 8 CO 9	Enumerate the various Committees and 2-3 recommendations	Cognitive	Must know	Knows	Lecture	Written MCQ	F & S	III	
CO 8 CO 9	Explain activities of Department of AYUSH, CCIM/ NCISM, CCRAS	Cognitive/K	Must know	Knows	Lecture & Group Discussion, Tutorial	Written MCQ Visit to Website of the Departments and discussion	F & S	III	
CO 8 CO 9	Identify the institutes All India Institute of Ayurved, New Delhi, (AIIA), National Institute of Ayurveda, Jaipur. ITRA, Jamnagar. Faculty of Ayurveda, BHU, Varanasi. Rashtriya Ayurveda Vidyapeetha, New Delhi.	Cognitive/K	Desirable to know	Knows	Lecture & Group Discussion, Video	Written MCQ, Visit to web sites of colleges and Discussions.	F & S	III	

List of Practicals Hours: 180 Hrs

SN	Name of Practical Sanskrit	Term	Hours
P1	Use of Dictionaries and Shabdakoshas अमरकोश:, वनौषधिवर्ग:, शब्दकल्पद्रुम:, वाचस्पत्यम्	I	15
P2	Translation from Sanskrit to desirable language.	II	15
P3	Translation from desirable language to Sanskrit.	II	15
P4	सम्भाषण भाषा पठनम् Spoken Sanskrit and Communication Skills	III	15
P5	All activity based practicals from above table are enlisted. (In table 2 and Table 3) They are as follows: 1. Presentation of videos about Maheshwar Sutra, Prayatna, Uccharana Sthanani etc. 2. Graphical Representation of Vocal system 3. Reading / Pronounciation 4. Preparing different Shabdarupani and recitation 5. Preparing different Kriyapadani. 6. Practicals on Karakani. 7. Practicals on Pratyayas 8. Practicals on Sandhis 9. Practicals on Samasa 10. Practicals on Upasargas. 11. Practicals on Avyayas 12. Practicals on Visheshan – Visheshya 13. Practicals on Anvay lekhana 14. Practicals on Nirukti 15. Practicals on Paribhasha 16. Practicals on Panchatantra	 I I I I/II I I/II II II II II II II I/II/III II/III I/II/II III	120 hours

Table 4: Learning objectives (Practical) of AyUG- SN & AI

Sanskrit Practical									
A4 Course outcome	**B4 Learning Objective (At the end of the session, the Students should be able to)**	**C4 Domain/sub**	**D4 Must to know/ desirable to know/Nice to know**	**E4 Level Does/ Shows how/ Knows how/ Know**	**F4 T-L method**	**G4 Assessment**	**H4 Formative /summative**	**I4 Term**	**J4 Integration**
Practical 1- अमरकोश: -वनौषधिवर्ग:, शब्दकल्पद्रुम:, वाचस्पत्यम्, Dictionaries **Time: 15 Hrs** (Practical/ Clinical **15** hours)									
CO 5	Refer the dictionaries. Refer the Books on synonyms	Cognitive domain - comprehension	Must to know	knows	Demonstration for identifying the meaning of the words with the support of the shabdakoshas like Amarkosha, Shabda kalpadruma, vachaspatyam etc. Record writing	Oral	F & S	I	
CO 5, 6	Improve the vocabulary. Use in reading and writing.	Cognitive domain - comprehension	Desirable know	knows	Group Discussions Record writing	Oral Recitation Competitions Aksharashloka competitions etc.	F & S	II	
Practical 2 - Translation from Sanskrit to desirable language. **Time: 15 Hrs.** (Practical/ Clinical **15** hrs)									
CO 3, 4, 5, 6	Translate from Sanskrit to	Cognitive domain -	Must to know	Shows how	Demonstration Group Activity	Oral Written	F & S	II	

	desirable language.	comprehensi on, synthesis.			Record writing				
Practical 3 - Translation from desirable language to Sanskrit. **Time: 15 Hrs.** (Practical/ Clinical **15** hrs)									
CO 3, 4, 5, 6	Translate from desirable language to Sanskrit.	Cognitive domain - comprehensi on, synthesis.	Must to know	Shows how	Demonstration Group Activity Record writing	Oral Written	F & S	II	
Practical 4- सम्भाषण भाषा पठनम् **Spoken Sanskrit Time: 15 Hrs** (Practical/ Clinical **15** hrs)									
CO 6, 7	Apply Sanskrit grammar. Write a small paragraph or Script. Speak atleast 5 to 10 lines in Sanskrit fluently. Stage a skit.	Cognitive domain - comprehensi on. Psychomotor domain – articulation Psychomotor domain – articulation	Must to know	Shows how	Staging small skits. Script writing, elocution competitions. Games Conversation Peer learning Creating conversations Conversations in different situations by the students.	Oral	F & S	III	

P5 All activity based practicals from above table are enlisted. **(In table 2 and Table 3)** They are as follows: (NLH 120)

1. Presentation of videos about Maheshwar Sutra, Prayatna, Uccharana Sthanani etc.
2. Graphical Representation of Vocal system
3. Reading / Pronounciation
4. Preparing different Shabdarupani and recitation
5. Preparing different Kriyapadani.
6. Practicals on Karakani.
7. Practicals on Pratyayas

8. Practicals on Sandhis
9. Practicals on Samasa
10. Practicals on Upasargas.
11. Practicals on Avyayas
12. Practicals on Visheshan - Visheshya
13. Practicals on Anvay lekhana
14. Practicals on Nirukti
15. Practicals on Paribhasha
16. Practicals on Panchatantra

Table 5: Non Lecture Activities Course AyUG- SN & AI

List non lecture Teaching-Learning methods	No of Activities	Total
Sanskrit		
Presentation of videos	2	120
Graphical Representation of Vocal system	1	
Guided Reading,	5	
Peer learning	4	
PBL	36	
Quizes, puzzles, cross word, word cloud	13	
Group activities	37	
SDL	17	
Recitation	5	
Practical (Refer Table 4	60	60
Ayurved Itihas	20	20
		200

Topic wise details –

List non lecture Teaching-Learning methods	No of Activities
Presentation of videos about Maheshwar Sutra, Prayatna, Uccharana Sthanani etc.	2
Graphical Representation of Vocal system	1
Reading / Pronounciation (Guided Reading, Peer learning)	7
Preparing different Shabdarupani and recitation (PBL, Peer learning, Quizes, word cloud, crosswords, recitation etc.)	14
Preparing different Kriyapadani. (PBL, Group activities)	5
Practicals on Karakani. (PBL, Group Discussions)	10
Practicals on Pratyayas. (PBL, Group Discussions)	6
Practicals on Sandhis (PBL, Quizes, puzzles, Group activities)	10
Practicals on Samasa (PBL, Quizes, puzzles,)	10
Practicals on Upasargas. (PBL, group activities)	3
Practicals on Avyayas (PBL, group activities)	3
Practicals on Visheshan – Visheshya (PBL)	3
Practicals on Anvay lekhana (PBL, SDL, Group Discussions)	14
Practicals on Nirukti (PBL, SDL, Group Discussions)	13
Practicals on Panchatantra - Vachya of sentences, Writing sentences using appropriate Shabdarupani and Kriyapadani etc. (SDL, PBL, group activities)	4
Practicals on Paribhasha (PBL, SDL, Group Discussions)	15
	120

Ayurved Itihas-

List non lecture Teaching-Learning methods	No of Activities
Group Discussion,	10
Video clips	5
Online Search, Prroject	
Tutorial	
Quiz, Collage, Puzzle	5
	20

Table 6: Assessment Summary

6 A-Number of Papers and Marks Distribution

S.No.	Subject Code	Papers	Theory	Practical/Clinical Assessment					Grand Total
				Practical/Clinical	Viva	Electives	IA	Sub Total	
1.	AyUG-SN & AI	2	200	-	75*	10 (Set-FA)	15	100	300
*Viva voce examination shall be for Sanskrit and not for Ayurved Ithihasa									

6 B - Scheme of Assessment (formative and Summative)

SR.NO.		PROFESSIONAL COURSE	DURATION OF PROFESSIONAL COURSE		
			First Term (1-6 Months)	Second Term (7-12 Months)	Third Term (13-18 Months)
1	AyUG- SN & AI	First	3 PA & First TT	3 PA & Second TT	3 PA & UE
	PA: Periodical Assessment; TT: Term Test; UE: University Examinations				

6 C - Calculation Method for Internal assessment Marks (15 Marks)

TERM	PERIODICAL ASSESSMENT*					TERM TEST**	TERM ASSESSMENT	
	A	B	C	D	E	F	G	H
	1 (15 Marks)	2 (15 Marks)	3 (15 Marks)	Average (A+B+C/3)	Converted to 15 Marks (D/15*15)	Term Test (Marks converted to 15) (15 Marks)	Sub Total _/30 Marks	Term Assessment (…./15)
FIRST							E+F	(E+F)/2
SECOND							E+F	(E+F)/2
THIRD						NIL		E
Final IA	Average of Three Term Assessment Marks as Shown in 'H' Column.							
	Maximum Marks in Parentheses *Select an Evaluation Method which is appropriate for the objectives of Topics from the Table 6 D for Periodic assessment. Conduct 15 marks assessment and enter marks in A, B, and C. ** Conduct Theory (100 Marks)(MCQ(20*1 Marks), SAQ(8*5), LAQ(4*10)) and Practical (100 Marks) Then convert total marks to 15 marks.							

6 D- Evaluation Methods for Periodical Assessment

S. No.	Evaluation Methods
1.	**Activities Indicated in Table 3 - Column G3 as per Indicated I, II or III term in column I3.**
2.	Practical / Clinical Performance
3.	Viva Voce, MCQs, MEQ (Modified Essay Questions/Structured Questions)
4.	Open Book Test (Problem Based)
5.	Summary Writing (Research Papers/ Samhitas)
6.	Class Presentations; Work Book Maintenance
7.	Problem Based Assignment
8.	Objective Structured Clinical Examination (OSCE), Objective Structured Practical Examination (OPSE), Mini Clinical Evaluation Exercise (Mini-CEX), Direct Observation of Procedures (DOP), Case Based Discussion (CBD)
9.	Extra-curricular Activities, (Social Work, Public Awareness, Surveillance Activities, Sports or Other Activities which may be decided by the department).
10.	Small Project
11.	Specific Periodic Assessment **AyUG- SN & AI** **Sanskrit (3 PA / term)** Quiz, Puzzles, Word cloud, Cross words, Preparation of charts, mindmaps, Assignments, Open book test, Recitation. SanskritTopics 8 and 9 शब्दरूपाणि and धातुरुपाणि from paper 1 can be asked for recitation, word cloud, crossword etc. in all Terms Test and viva or any from above table. **Ayurved Itihas (3 PA/term)** Quiz, Puzzles, Word cloud, Cross words, Preparation of charts, mindmaps, Assignments, Open book test, Video Clips making. Any of Evaluation Methods for Periodical Assessment

6 E- Paper Layout

I PROFESSIONAL BAMS EXAMINATIONS

AyUG SN & AI

PAPER-I

Time: 3 Hours Maximum Marks: 100

INSTRUCTIONS: All questions compulsory

TOTAL MARKS 100 Sanskrit

		Number of Questions	Marks per question	Total Marks
Q 1	Multiple Choice Questions (MCQ) All Sanskrit	20	1	20
Q 2	Short answer questions (SAQ) All Sanskrit	8	5	40
Q 3	Long answer questions (LAQ) All Sanskrit	4	10	40
				100

I PROFESSIONAL BAMS EXAMINATIONS

AyUG SN & AI

PAPER-II

Time: 3 Hours

INSTRUCTIONS: All questions compulsory

TOTAL MARKS 100 = [Sanskrit, (LAQ and SAQ) 80 marks + Ayurved Itihas, (MCQ) 20 marks]

		Number of Questions	Marks per question	Total Marks
Q 1	Multiple Choice Questions (MCQ) Ayurved Itihas, (all 20)	20	1	20
Q 2	Short answer questions (SAQ) All Sanskrit	8	5	40
Q 3	Long answer questions (LAQ) All SaAnskrit	4	10	40
				100

6 F- Disribution of Theory Exam

	Paper I: Sanskrit			**D** **Type of Questions** **"Yes" can be asked.** **"No" should not be asked.**		
	A **List of Topics**	**B** **Term**	**C** **Marks**	**MCQ** **(1 Mark)**	**SAQ** **(5 Marks)**	**LAQ** **(10 Marks)**
1	संस्कृतवर्णानाम् परिचयः – माहेश्वरसूत्राणि, उच्चारणस्थानानि, बाह्यप्रयत्नानि, अभ्यन्तर प्रयत्नानि	**I**	**05**	**5**	**No**	**No**
2	संज्ञा- **2.1 -** संयोगः, संहिता, ह्रस्वदीर्घप्लुतः, अनुनासिकः, पदम्, धातुः, उपसर्गः, गुणः, वृद्धि **2.2 -** इत्, लोपः, प्रत्याहारः, उदात्तः, अनुदात्तः, स्वरितः, सवर्णः, निपातः, प्रगृह्यम्,	**2.1 – I** **2.2 – II**	**05**	**5**	**No**	**No**
3.	उपसर्गाः- उपसर्गा :क्रियायोगे प्र, परा, अप, सम्, अनु, अव, निस्, निर्, दुस्, दुर्, वि, आङ्, नि, अपि, अधि, अति, सु, उत्, अभि, प्रति, परि, उप	**II**	**05**	**No**	Yes (1 que of 5 marks)	**No**
4.	अव्ययानि **4.1 -** च अपि खलु हि तु किल ननु वा च एव **4.2-** पुनः विना उच्चैः ऋते एवम् सह सार्धम् युगपत् यथा –तथा यावत्-तावत् इति यदा-तदा यदि-तर्हि साकम् न कुत्र कति कुतः किमर्थम् ,कियत् इह अत्र तत्र सर्वत्र अन्यत्र कुत्र एकत्र सदा अन्यथा एकथा A) Identify अव्ययानि B) Explain the meaning with reference to the context C) Construct the sentences using अव्ययानि	I A II B III C	**5**	**No**	Yes (1 que of 5 marks)	**No**
5.	कारकप्रकरणम् तथा वाच्य प्रयोगः – कर्तृकारकम् , कर्मकारकम् , करणकारकम् , सम्प्रदानकारकम्, अपादान कारकम्, अधिकरणकारकम् , सम्बन्धः, उपपदविभक्तिः A) Discriminate the विभक्ति and their meaning. B) Identify the karakas from Ayurveda texts like **करणम् कारणम्** C) Construct sentences D) Translate sentences from English to Sanskrit & from Sanskrit to English.	I A II B III C, D	**15**	**5**	Yes (1 que of 5 marks)	Yes (1 que of 5 marks)

6.	सन्धि: **6.1 -** अच् सन्धि/:स्वरसन्धि: - यण् सन्धि- इको यणचि, गुण सन्धि=:आद्गुण: वृद्धिसन्धि-:वृद्धिरेचि, अयवायाव सन्धि: - एचोऽयवायव/:वान्तो यि प्रत्यये, लोप सन्धि-:लोप :शाकल्यस्य, पररूपसन्धि-:एङि पररूपम्, पूर्वरूपसन्धि- एङ: पदान्तादति, प्रकृतीभाव- सर्वत्र विभाषा गोः , प्लुत प्रगृह्य अचि नित्यम् | **6.2 -** हल्सन्धि: /व्यञ्जनसन्धि: - श्चुत्वसन्धि -:स्तो : श्चुना श्चु:, ष्टुत्वसन्धि -:ष्टुना ष्टु:, जश्त्व सन्धि-:झलां जशो/न्ते, अनुनासिकसन्धि-:यरोऽनुनासिकेऽनुनासिको वा/प्रत्यये भाषायां नित्यम्, परसवर्णसन्धि-:तोर्लि/:वा पदान्तस्य, चर्त्वसन्धि: खरि च, पूर्वसवर्णसन्धि-:झयोऽहोऽन्यतरस्याम्, छुत्वसन्धि: शश्छोऽटि /छत्वममीति वाच्यम्, अनुस्वारसन्धि -: मोऽनुस्वार:, तुगागमसन्धि-: शि तुक्/छे च/पदान्ताद्वा, रुत्वआदेशसन्धि-: नश्छव्यप्रशान् **6.3 -** विसर्गसन्धि: - रुत्वसन्धि-:ससजुषो रु:, उत्वसन्धि-: अतो रोरप्लुदादप्लुते/हशि च, रो रि, भो भागो अघो अपूर्वस्य योऽशि , रोऽसुपि , एतत्तदोः सुलोपोऽकोरनञ् समासे हलि, सोऽचि लोपे चेत् पादपूरणम् | **6.4.-** रुत्वप्रकरणसन्धि-: [सङ्क्षिप्य पाठनम् – Brief teaching] सम :सुटि, कानाम्रेडिते च, अत्रानुनासिको पूर्वस्य तु वा,अनुनासिकात्परोऽनुस्वार:, खरवसानयोर्विसर्जनीय:, विसर्जनीयस्य स:,सम्पुङ्कानां सो वक्तव्य: |	**II**	**15 (6.1- 5marks 6.2/6.4- 5marks 6.3 – 5marks)**	**No**	Yes (1 que of 5 marks)	Yes 10 (1 Que. of 10 marks)
7.	**समास** **7.1 -** अव्ययीभावसमास: - **7.1.1 -** अव्ययम् विभक्तिसमीपसमृद्धिव्यर्ध्यर्थाभावात्ययसम्प्रतिशब्दप्रादुर्भावप श्चायथानुपूर्व्ययौगपद्यसादृउश्यसम्पत्तिसाकल्यान्तवचनेषु | **7.1.2. -** प्रथमा निर्दिष्टम् उपसर्जनम्,/ उपसर्जनं पूर्वम् /नाव्ययीभावादतो/ म् त्वपञ्चम्या/: तृतीयासप्तम्योर् बहुलम्/अव्ययीभावे चाकाले | **7.2. -** तत्पुरुष समास: - द्वितीया श्रितातीतपतितगतात्यस्तप्राप्तापन्नै:, तृतीया तत्कृतार्थेन गुणवचनेन, कर्तृकरणे कृता बहुलम्, चतुर्थी तदर्थार्थ बलिहितसुखरक्षितै:, पञ्चमीभयेन, षष्ठी, सप्तमीशौण्डै ,: विशेषणं विशेष्येणबहुलम् ,उपमानानि सामान्यवचनै,: नञ् ,कर्मधारय ,द्विगु,: उपपद तत्पुरुष	**II**	**15 (7.1.1 &7.1.2 -- 5marks 7.1.3 – 5marks 7.14 & 7.15 – 5marks)**	**No**	Yes (1 que of 5 marks)	Yes 10 (1 Que. of 10 marks)

	7.3 - बहुव्रीहि समास - :अनेकमन्यपदार्थे **7.4 -** द्वन्त्वसमास - :चार्थे द्वन्द्व|:					
8.	शब्दरूपणि **8.1 -** पुल्लिङ्ग शब्दरूपाणि अकारान्त: - वात, वैद्य, रुग्ण, राम आदि इकारान्त: - अग्नि, मुनि आदि उकारान्त: - ऋतु, भानु गुरु आदि ऋकारान्त :- नृ, धातृ, पितृ आदि ओकारान्त: - गो आदि नकारान्त – श्लेश्मन्, रोगिन्, ज्ञानिन् आदि सकारान्त – चन्द्रमस् आदि तकारान्त – मरुत् आदि दकारान्त – सुहृद् आदि जकारान्त – भिषज्, आदि शकारान्त: - कीदृश्, एतादृश् आदि **8.2 -** स्त्रीलिङ्ग शब्दरूपाणि आकारान्त :- बला, कला, स्थिरा, माला आदि इकारान्त: - सम्प्राप्ति, प्रकृति, मति आदि ईकारान्त: - धमनी, नदी आदि उकारान्त: - रज्जु, धेनु आदि ऊकारान्त: - वर्षाभू, वधू आदि ऋकारान्त :- मातृ आदि चकारान्त: - वाच् आदि तकारान्त: - योषित्, सरित् आदि दकारान्तः – परिषद् आदि जकारान्त: - स्रज् आदि सकारान्त: - जलौकस्, सुमनस् आदि षकारान्तः – प्रावृष् आदि **8.3 –** नपुंसकलिङ्ग शब्दरूपाणि अकारान्त: - पित्त, वन आदि उकारान्त: - अश्रु, मधु आदि इकारान्त: - अक्षि, अस्थि, वारि, दधि आदि ऋकारान्त: - ज्ञातृ, धातृ आदि नकारान्त: - वर्त्मन्, दण्डिन् आदि सकारान्त: - स्रोतस्, मनस् आदि षकारन्तः – सर्पिष्, आयुष् आदि तकारान्त: - शकृत्, जगत् आदि **8.4-** सर्वनामपदानि – अस्मद्, युष्मद्, तद्, एतद्, यद्, किम्, इदम् आदि	**I**	**10**	**No**	Yes (1 que of 5 marks)	Yes (1 que of 5 marks)
9.	धातुरुपाणि– **9.1 -** परस्मैपदि - लट्/लृट्/लङ्/विधिलिङ्/लोट् भ्वादि गण - भू सत्तायाम्, क्षि क्षये, गमॢ्गम् (गतौ, पा	**I**	**10**	**No**	Yes (1 que of 5 marks)	Yes (1 que of 5 marks)

	पाने, जीव्, पच्, त्यज् ,दृश्(पश्य) अदादि गण - अद् भक्षणे , हन् हिम्सागत्यो:, वा गतिगन्धनयो: पा रक्षणे ,अस्, श्वस्स्वप ,ृ ब्रू , जुहोत्यादि गण- धा धारणपोषणयो:, पृ - पलनपूरणयो:, हा त्यागे ,दा (दाञ्) दिवादि गण- दिवु क्रीडादौ, त्रसी उद्वेगे, पुष् पुष्टौ, कुप्, नश्, तुष्, स्निह्, जृ स्वादि गण- चिञ् चयने, शक्श्रु , तुदादि गण- तुद् व्यथने, कृष् विलेखने ,लिख् लेखने ,दिश्, कृन्त्, क्षिप्, स्पृश् रुधादि गण- रुधिर् आवरणे, भिदिर् विदारणे , भुजः तनादि गण- तनु विस्तारे, कृञ् करणे क्र्यादि गण- प्रीञ्- तर्पणे कान्ते च, ग्रह् उपादाने ज्ञः चुरादि गण- गण् संस्थाने, साध्, ताड्, धृ, कथ् वाक्यप्रबन्धे आत्मनेपदि - भ्वादि गण - वृतु वर्त्तने ,वृध्(वर्ध्), लभ्, सेव्, रुच् अदादि गण - शीङ् स्वप्नेब्रू , जुहोत्यादि गण- धा धारणपोषणयो ,:दा (दाञ्), दिवादि गण- जनी प्रादुर्भाव ,मन्, बुध्, पद्, विद् स्वादि गण- चिञ् चयने, तुदादि गण- तुद् व्यथने, कृष् विलेखने ,म्रि, विद्, मुच्, सिञ्च्, रुधादि गण- रुधिर् आवरणे, भिदिर् विदारणेभुज ,ृ तनादि गण- तनु विस्तारे, कृञ् करणे क्र्यादि गण- प्रीञ्- तर्पणे कान्ते च, ग्रह् उपादानेज्ञ ,ः चुरादि गण- चुर् ,क्षाल्, कथ्, घोष्, भक्ष् आयुर्वेदसंहितासु विद्यमानानां धतुरूपाणां परिचयीकरणम् अभिकाम्यम् **9.2 -** लृङ्ग , आशीर्लिङ्ग, लिट , लुङ्ग, लुड [सङ्क्षिप्य पाठनम्-Brief teaching] भ्वादि गण ,अदादि गण , जुहोत्यादि गण ,दिवादि गण ,स्वादि गण ,तुदादि गण ,रुधादि गण ,तनादि गण ,क्र्यादि गण ,चुरादि गण पूर्वोक्तधातुष्वेकस्य पञ्चलकारेषु रूपाणि दर्शयेत् | परं परीक्षायाम् न पृष्टव्यानि |					
10.	प्रत्ययाः **10.1 –** क्त - क्तवत् ,तव्यत् – अनीयर् ,शतृ – शानच् , ल्युट् - ण्वुल् ,क्त्वा - ल्यप् ,णिनि ,:क्तिन्, तुमुन् प्रत्ययाणाम् प्रयोगा: एव पृष्टव्या :| **10.2 -** भावे घञ् ,करणे घञ् ,भावे ष्यञ् ,कर्मणि ण्यत् , कर्त्तरि अच् अप् आयुर्वेदसंहितायां विद्यमानानां भावे/करणे/कर्त्तरि/ताच्छील्ये/ आदि प्रत्ययानां परिचय :करणीय :| परं परीक्षायाम् न	**I**	**10**	**3**	Yes (2 Que of 1 mark)	Yes (1 que of 5 marks)

	पृष्टव्या :| परीक्षायाम् वाच्य प्रयोग: स्वरुपे पृष्टव्य :|					
11	विशेषण विशेष्य	**II**	**05**	**2**	Yes (3 Que of 1 mark)	**No**

	Paper II **Sanskrit and Ayurved Itihas**			**D** Type of Questions "Yes" can be asked. "No" should not be asked.		
	Part A Sanskrit **List of Topics**	**B Term**	**C Marks**	**MCQ (1 Mark)**	**SAQ (5 Marks)**	**LAQ (10 Marks)**
1	निरुक्ति तथा पर्याय पदानि– A) आयु: ,शरीर, मन:, अग्नि,: जलम्, वात:, पित्तम्, कफ: B) रस, रक्त, मांस, मेद, अस्थि, मज्जा, शुक्र , इन्द्रियम्,श्रोत्र:, चक्षु:, रसना ,, घ्राण (C धी, धृति, स्मृति,बुद्धी, मति , प्रज्ञा ,मूत्र ,पुरीष:, स्वेद, आत्मा, रोग:,निदानम् ,रोगि ,:भेषजचिकित्सा , आदि	A -I B – II C- III	15	**No**	Yes (2 que of 5 marks)	Yes (1 que of 5 marks)
2	परिभाषापदानि – A) आयुर्वेद:, पञ्चमहाभूतानि, त्रिगुणम्, दोषा,: मला:, दूष्यम्, सम्सर्ग:, सन्निपात: B) द्रव्य,गुण , कर्म ,सामान्य, विशेष, गुरु, लघु, प्रकृति:, विकृति:,चय:, प्रकोप:, प्रसर:, स्थानसम्श्रय:, दोषगति: भेद:, रस:, वीर्यम्, विपाक:, कार्यकारणभाव: C) स्रोतस् , कोष्ठ:, आमम्, विरुद्धाह्नम्, विरुद्धाहार:, विदाहि, विष्टम्भि, सात्म्यम्, ओकसात्म्यम्, देशसात्म्यम्, अत्यशनम्, अध्यशनम्, स्थानी, योगवाही, पथ्यम्, अपथ्यम्, कृतान्नवर्ग:, अवस्थापाक:, वेग: ,शोधन,शमन , लंघन , बृहण, अनुपान आदि	A - I B - II C- III	20	**No**	Yes (2 que of 5 marks)	Yes (1 Que. of 10 marks)
3.	अन्वयलेखनम् - A) अष्टाङ्गहृदयम् सूत्रस्थानम् –अध्यायत :सर्वाणि सूत्राणि १.आयुष्कामीयम् २.दिनचर्या ३.रोगानुत्पादनीयम् B) अष्टाङ्गहृदयम् सूत्रस्थानम् –अध्यायत :सर्वाणि सूत्राणि दोषादिविज्ञानीयम् दोषभेदीयम् दोषोपक्रमणीयम् द्विविधोपक्रमणीयम् C) वैद्यकीय सुभाषितसाहित्यम् – shloka numbers - प्रथम: 1, 2 द्वितीय: 1, 7 तृतीय: 9	A- I B - II C - III	30 (A B C 10 marks each)	**No**	Yes (3 que of 5 marks)	Yes (1 Que. of 10 marks and 1 Que of 5 marks as part A of Que. 3)

	चतुर्थ: 2, 3 पञ्चम: 2, 3 षष्ठ: 1, 4, 7 सप्तम: 2, 5, 17 अष्टम: 13, 12 नवम: 12, 13 दशम: 1, 19 एकादश: 1, 2 द्वादश: 1, 6 त्रयोदश: 1, 7, 8, 9 चतुर्दश: 2, 3, 4 पञ्चदश: 7, 10 षोडश: 5, 6 सप्तदश: 1, 4 अष्टादश: 1, 2, 3 एकोनविंशति: 2, 3, 4 विंशति: , 12, 3, 4					
4.	पञ्चतन्त्र-अपरीक्षितकारकम् ५ अध्याय	III	15	**No**	Yes (1 que of 5 marks)	Yes (1 que of 10 marks)
	Part B **Ayurved Itihas**					
	All Topics			**Yes**	**No**	**No**

6 G- Question paper blue print
Paper I – Sanskrit

A Question Sr. No	B Type of Question	C Question Paper Format
Q1	**Multiple choice Questions (MCQ)** 20 Questions 1 mark each All compulsory Must know part 15 MCQ, Desirable to know 3 MCQ. Nice to Know 2 MCQ	1. Topic number 1 2. Topic number 1 3. Topic number 1 4. Topic number 1 5. Topic number 1 6. Topic number 2 7. Topic number 2 8. Topic number 2 9. Topic number 2 10. Topic number 2 11. Topic number 5 12. Topic number 5 13. Topic number 5 14. Topic number 5 15. Topic number 5

		16. Topic number 10 17. Topic number 10 18. Topic number 10 19. Topic number 11 20. Topic number 11
Q2	**Short answer Questions (SAQ)** 8 questions 5 marks for each que. All compulsory Must know part 7 questions, 1question on Desirable to know. No Questions on Nice to know.	Q1 Topic 6 अधोदत्तानां पदानां सन्धिं छित्वा वा योजयित्वा लिखत (5 Que x 1 marks each) Q2 Topic 7 अधोदत्तानां पदानां विग्रहवाक्यं समस्तपदं वा लिखत 5 Que x 1 mark each Q3 Topic 4 - अधोदत्तैः अव्ययपदैः रिक्तस्थानम् पूरयत। 5 Que x 1 mark each Q4 Topic 8 - शब्दरुपाणि लिखत (5 Que x 1 mark each) Q5 Topic 3 - उपसर्गाः (स्व)वाक्येषु योजयत 5 Que x 1 mark each Q6Topic 10 and 11- (स्व)वाक्येषु योजयत – 5 Que x 1 mark each Q7 Topic 9 - धातुरुपाणि लिखत 5 Que x 1 mark each Q8 Topic 5, 6 – अधोदत्ते श्लोके रेखाङ्गितानां पदानां कारकसंबंधं विशदीकृत्वा / निश्चयीकृत्वा तदनुसृत्य पदानां अर्थं लिखतु । (shlokas should be taken from the syllabus.) 5 Que x 1 mark each
Q3	**Long answer Questions (LAQ)** All compulsory 4 questions 10 marks for each que. All questions on must know. No Questions on Nice to know and Desirable to know.	Q1 Topic 8, 5 – उचितं शब्दरूपं विलिख्य वाक्ये योजयत। 5 Que. X 2 mark Q2 Topic 7 - अधोदत्तेषु श्लोकेषु रेखाङ्गितानां समस्तपदानां विग्रहवाक्यं समस्तपदम् वा समासनाम्ना सह लिखत। (Underline 5 Samast padas or give 5 Vigrah vakyas from a 5 to 7 line passage **or** 2 to 3 shlokas from the syllabus.) 5 Que. X 2 marks Q3 Topic 6 - अधोदत्ते परिच्छेदे रेखाङ्गितानां सन्धिं छित्वा वा योजयित्वा सन्धि सूत्रम् च लिखत।(Underline 5 Sandhi padas or Sandhi Vigrahas from a 5 to 7 line passage **or** 2 to 3 shlokas from the syllabus.) 5 Que. X 2 marks Q4 Topic 5, 9, 10 - अ) अधोदत्तस्य धातोः तव्यत् तुमुन् ल्यप् क्तवत् शतृ/शानच् प्रत्ययरूपाणि लिखत। 5 Que. X 1 marks आ) वाच्य प्रयोगः । 5 Que. X 1 marks (Sentences should be taken from syllabus Panchatantra.)

AyUG SN & AI :
Paper II – Sanskrit and Ayurved Itihas

A Question Sr. No	B Type of Question	C Question Paper Format
Q1	**Multiple choice Questions (MCQ)** **Ayurved Itihas** 20 Questions 1 mark each All compulsory Must know part 15 MCQ, Desirable to know 3 MCQ. Nice to Know 2 MCQ	All Questions From **Ayurved Itihas**.Paper II Part B 1. Topic number 1/2 2. Topic number 3/4 3. Topic number 5/6 /7 /8 4. Topic number 9/ 10 5. Topic number 1/2 6. Topic number 3/4 7. Topic number 5/6 /7 /8 8. Topic number 9/ 10 9. Topic number 1/2 10. Topic number 3/4 11. Topic number 5/6 /7 /8 12. Topic number 9/ 10 13. Topic number 1/2 14. Topic number 3/4 15. Topic number 5/6 /7 /8 16. Topic number 9/ 10 17. Topic number 1/2 18. Topic number 3/4 19. Topic number 5/6 /7 /8 20. Topic number 9/ 10
Q2	**Short answer Questions (SAQ)** **Sanskrit** All compulsory 8 questions 5 marks for each que. Must know part 7 questions, 1question on Desirable to know. No Questions on Nice to know.	1. Topic number 3 अधोदत्तस्य श्लोकस्य पदच्छेदं लिखित्वा रेखाङ्गितानां पदानां शब्दरुपाणि धातुरुपाणि वा लिखत | 2. Topic number 3 अधोदत्तस्य श्लोकस्य अन्वयम् अर्थम् च लिखत 3. Topic number 2/3 अधोदत्तस्य श्लोकस्य अन्वयम् अर्थम् च लिखत 4. Topic number 3/ 4 प्रयोगं विपरिणमयत | 5 Que x 1 markeach 5. Topic number 2 अधोदत्तानाम् टिप्पणिर्लिखत | 6. Topic number 1 शब्दस्य निरुक्तिं तथा पर्यायवचनानि च लिखत | 7. Topic number 3/4 संस्कृत भाषायां अनुवदत | 8. Topic number 3/4 मातृभाषायां अनुवदत |
Q3	**Long answer Questions (LAQ)** **Sanskrit** All compulsory 4 questions 10 marks for each que.	1. Topic 4 अधोदत्तकथाया: साराम्शं सम्स्कृत भाषायाम् लिखत | or Comprehension. 2. Topic 2 अधोदत्तानाम् टिप्पणिर्लिखत | 2x5 (5 marks for each) 3. Topic 1, 3 A) प्रश्नानाम् पूर्णवाक्येन उत्तराणि लिखत | 5 Que.X 1 Mark for each B) निरुक्तिं तथा पर्यायवचनानि च लिखत || 5 Que. X 1 mark for each

	All questions on must know. No Questions on Nice to know and Desirable to know.	4. Topic 3 अधोदत्तस्य श्लोकस्य पदच्छेदं विग्रहवाक्यम् अन्वय: वाक्यार्थं शास्त्रार्थं च लिखत | 5 Que. X 2 marks

6 H - Distribution of Practical Exam

Practical 100 Marks – (Viva 75 + Elective 10 + IA 15) Marks

SN		Heads	Marks
A	**VIVA (75)**		
	1	Reading (structured approach)	**10**
	2	Shabdarupani and Karakani	**10**
	3	Sandhi and Padachcheda, Dhaturupani	**10**
	4	Samas	**5**
	5	Paribhasha, Nirukti	**5**
	6	Anvay	**10**
	7	Constructing sentences and conversation	**10**
	8	Compilation/ Record writing [Compilation/ Record writing book should contain 1. Anvay 2. Padachcheda 3. Samas 4. Shabdarupani 5. Dhaturupani 6. Bhavarth Of the 40 shlokas from Sanskrit Paper 2 topic numbers 3 A and B Ashtanga Hridayam and ten verses from Charak Samhita Sutrasthan 5 and 6 from Samhita Adhyayan - 1 subject.]	**10**
	9	Communication Skill	**5**
B	**Internal Asessment (15)**		**15**
C	**Electives (10)**		**10**
		Total Marks	**100**

7. References/ Resourses

Sanskrit

Books

1. संस्कृतपाठ्यपुस्तकम् प्रथमः तथा द्वितीयभागः- Sanskrit for Ayurveda part- I and Part –II Published by CCIM New Delhi
2. आयुर्वेदस्य भाषा-पञ्चभागाः- Ayurvedasya bhaSha part I to part –V samskrita samvardhana prathisthan mumbai
3. लघुसिद्धान्तकौमुदि: - वरदराज - Laghusiddhantakaumudi of bhattojidikshita
4. सिद्धन्तकौमुदि – भट्टोजिदीक्षितः siddhantakaumudi
5. वैद्यकीयसुभाषितसाहित्यम् - Vaidyakiyasubhashitasahityam, भास्कर गोविन्द घाणेकर, चौखम्बा प्रकाशन
6. पन्तन्त्रम् अपरीक्षितकारकम् - Pancatantra aparikshitakarakam 1 to 5 stories
7. शब्दकल्पद्रुमः - Sabdakalpadruma:
8. वाचस्पत्यम्- Vachaspatyam
9. अमरकोशः- Amarakosha
10. सिद्धारूपम् - Siddharupam
11. धातुपाठः- Dhatupatha
12. Sanskrit to English and English to Sanskrit Dictionary – Monier Williams
13. Sanskrit to Hindi and Hindi to Sanskrit Dictionary – Va. Shi. Apte
14. Sanskrit to Regional/ Desirable language dictionaries.
15. Ayurvediya Shabdakosha
16. Encyclopedic dictionary of Ayurveda – Dr. Kanjiv Lochan, Dr. P.S. Byadgi (Chaukhambha Publications)

Online Recourses:-

- Crossword Online
  https://crosswordlabs.com/
- Readymade Sanskrit Puzzles
  http://webapps.samskrutam.com/tools/CrosswordPuzzle.aspx
- Learning Sanskrit - Pronunciation 1

  https://www.sanskrit-trikashaivism.com/en/learning-sanskrit-pronunciation-1-1/456
- Pronunciation of all Sanskrit letters……

  sanskritdocuments.org
  http://sanskritdocuments.org/learning_tools/sarvanisutrani/allsutrani.htm
  sanskrit.jnu.ac.in
  http://www.taralabalu.org/panini/greetings.htm
- Vyakarana –

  https://sites.google.com/site/samskritavyakaranam/
- कोशाः / Dictionaries -
- Cologne Digital Sanskrit Lexicon:
  https://www.sanskritlibrary.org/cologne.html

https://www.sanskritdictionary.com/

www.monierwilliams.com

- Sanskrit Computational tools Samsadhani- https://sanskrit.uohyd.ac.in/scl/
- Learning https://www.learnsanskrit.cc/
- The Sanskrit Heritage Site https://sanskrit.inria.fr/
- Sanskrit Dictionary for Spoken Sanskrit www.learnsanskrit.cc https://spokensanskrit.org/index.php?mode=3&direct=es&script=hk&tran_input=name

Ayurved Itihas

Reference book

1. Upodghata of Kashyapasamhita (Paragraph of acceptance of Indian medicine) Rajguru Hem Raj Sharma
2. Upodghata of Rasa Yogasagar Vaidya Hariprapanna Sharma
3. Ayurveda Ka Itihas KaviraSuram Chand
4. Ayurveda Sutra Rajvaidya Ram Prasad Sharma
5. History of Indian Medicine (1-3 part) Dr. GirindrNath Mukhopadhyaya
6. A Short history of Aryan Medical Science Bhagwat Singh
7. History of Indian Medicine J. Jolly
8. Hindu Medicine Zimer
9. Classical Doctrine of Indian Medicine Filiyosa
10. Indian Medicine in the classical age AcharyaPriyavrata Sharma
11. Indian Medicine (Osteology) Dr. Harnley
12. Ancient Indian Medicine Dr. P. Kutumbia
13. Madhava Nidana and its Chief Commentaries (Chapters highlighting history) Dr. G.J. Mulenbelt
14. Ayurveda Ka BrihatItihasa Vaidya Atridev Vidyalankara
15. Ayurveda Ka VaigyanikaItihasa Acharya Priyavrata Sharma
16. Ayurveda Ka PramanikaItihasa Prof. Bhagwat Ram Gupta
17. History of Medicine in India Acharya Priyavrata Sharma
18. Vedome Ayurveda Vaidya Ram GopalS hastri
19. Vedomein Ayurveda Dr. Kapil Dev Dwivedi
20. Science and Philosophy of Indian Medicine Dr. K.N. Udupa
21. History of Indian Medicine from Pre-Mauryan to Kushana Period Dr. Jyotirmitra
22. An Appraisal of Ayurvedic Material in Buddhist literature Dr. Jyotirmitra
23. Mahayana Granthon mein nihita Ayurvediya Samagri Dr. RavindraNathTripathi
24. Jain Ayurveda Sahitya Ka Itihasa Dr. Rajendra Prakash Bhatnagar
25. Ayurveda- Prabhashaka Jainacharya Acharya Raj Kumar Jain
26. CharakaChintana Acharya Priyavrata Sharma
27. Vagbhata Vivechana Acharya Priyavrata Sharma
28. Atharvaveda and Ayurveda Dr. Karambelkara
29. Ayurvedic Medicine Past and Present Pt. Shiv Sharma
30. Ancient Scientist Dr. O.P. Jaggi
31. Luminaries of Indian Medicine Dr. K.R. Shrikanta Murthy
32. Ayurveda Ke Itihasa Ka Parichaya Dr. RavidduttaTripathi
33. Ayurveda Ke Pranacharya Ratnakara Shastri
34. Ayurveda Itihasa Parichaya Prof. Banwari Lal Gaur

COURSE CURRICULUM FOR FIRST PROFESSIONAL BAMS
(PRESCRIBED BY NCISM)



PADARTHA VIJNANAM

(SUBJECT CODE- AyUG-PV)

FUNDAMENTAL PRINCIPLES OF AYURVEDA AND QUANTUM MECHANICS

(Applicable from 2021-22 batch onwards for 5 years or until further notification by NCISM, whichever is earlier)

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BOARD OF AYURVEDA
NATIONAL COMMISSION FOR INDIAN SYSTEM OF MEDICINE
NEW DELHI-110058

SCAN ME
Padartha

NCISM

I professional Ayurvedacharya (BAMS)

Subject Code: AyUG-PV

Padartha Vijnanam

FUNDAMENTAL PRINCIPLES OF AYURVEDA AND QUANTUM MECHANICS

Total number of Teaching hours: 230			
Lecture hours (LH) - Theory		**90 Hours**	**90 Hours (LH)**
Paper I	45 Hours		
Paper II	45 Hours		
Non-Lecture hours (NLH) – Theory		**140 Hours**	**140 Hours (NLH)**
Paper I	70 Hours		
Paper II	70 Hours		
Non-Lecture hours (NLH) - Practical		**Hours**	

Examination (Papers & Mark Distribution)					
Item	**Theory Component Marks**	**Practical Component Marks**			
		Practical	**Viva**	**Elective**	**IA**
Paper I	**100**	**100**	**60**	**10 (Set-FB)**	**30**
Paper II	**100**				
Sub-Total	**200**	**200**			
Total marks	**400**				

PREFACE

All Medical sciences whether ancient or modern, needs frequent updating. Acharya Vagbhata stresses upon reform of Ayurveda according to the present time (yuganurupasandarbha). The syllabus of Ayurveda also needs reformation for effective dissemination of principles of Ayurveda which is strongly based on Padartavijnanam. Acharya Vagbhata says one who seeks long life should respect Ayurveda by four strategies that are knowedge (Adhiti), comprehension(Bodha)skill(Acharana) and Attitude(pracharana).These teaching methodologies are evolved from the ancient upanishadic way of teaching(Adhyapanavidhi).The new principles of teaching strategies of blooms taxonomy correlate with the ancient way of teaching and the syllabus of Padarthavijnanam has been revamped according to the need of hour.

Padartha Vijnanam is a unique and mandatory subject needed for learning the stream of Ayurveda. It is the combination of science and philosophy. One can say that the science and philosophy are the two sides of the same coin. The search behind "existence of world/self" when progresses outward it travels the path of science and when this search is inwards it becomes philosophy. Thus, Padartha Vijnanam is an essential base of Ayurveda education. When the foundation becomes strong building also becomes strong.

Padartha Vijnanam not only provides the platform to understand Ayurveda better but it also helps the students to appreciate the moral values beneficiating them in developing the personality. As mentioned in graduate attributes this subject helps the student to become eloquent communicator and self-directed learner who constantly endeavors to advance knowledge and skills to improve healthcare and social well-being.

This syllabus reform of Padartha Vijnanam has taken care of adopting the modern teaching-learning methodology well-merging with the ancient one. This will definitely enhance the understanding of the subject in a better way.

Introduction of practicals is the zest for the subject. As we all know- "I hear, and I forget. I see and I remember. I do, and I understand". The teaching learning process must be joyful along with lecture methods like group discussions, debate, roleplay and PBL. They are also mentioned and the flexibility is kept. Here in this syllabus, the activity book is introduced to induce activity-based learning. This will definitely create the interest in the subject. There are some self-learning activities also which will induce the thirst for the knowledge in the student. This will help the student to understand theoretical concepts in a lucid way and also provides hands on experience

Index

Course Code and Name of Course 5
Table 1- Course learning outcomes and matched PO. 5
Table 2 : Contents of Course AyUG-PV 6
Paper I 6
Paper II 8
Table 3: Learning objectives (Theory) of Course AyUG-PV 10
Paper I 10
Paper II 27
List of Practicals 41
Table 4: Learning objectives (Practical) of AyUG-PV 46
Table 5: Non Lecture Activities Course AyUG-PV 58
Table 6: Assessment Summary AyUG-PV 58
6 A - Number of Papers and Marks Distribution 58
6 B - Scheme of Assessment (formative and Summative) 58
6 C - Calculation Method for Internal assessment Marks (30 Marks) 59
6 D -Evaluation Methods for Periodical Assessment 59
6 E- Paper Layout 60
Paper-I 60
Paper-II 60
6 F- Disribution of Theory Exam 61
Paper I 61
Paper II 61
6 G- Question paper blue print 62
Paper I – 62
Paper II 63
6 H Distribution of Practical Exam 64
7. References /Resourses 65

Course Code and Name of Course

	Course code	Name of Course
	AyUG-PV	Padartha Vijnanam (Fundamental Principles of Ayurveda and Quantum Mechanics)

AyUG-PV Course

Table 1- Course learning outcomes and matched PO.

CO	**Course learning Outcomes** (CO) **AyUG-PV** At the end of the course AyUG-PV, the student should be able to-	**Course learning Outcome matched with program learning outcomes.**
CO 1	Illustrate the scope and utility of Ayurveda	PO1
CO 2	Explain Philosophical foundation of Ayurveda, Principles (Siddhantha) of Darshana along with their similarities and relevance in Ayurveda and contemporary sciences.	PO1, PO2, PO6
CO 3	Analyse and interpret Padartha (Prameya) in Darshana and Ayurveda. Recognize their applications in Ayurveda.	PO1, PO2, PO9
CO 4	Distinguish, analyse and apply concept of Pramana shastra (Epistemology) in Darshana and Ayurveda. Demonstrate their applications in Ayurveda.	PO1, PO2, PO9
CO 5	Analyse and apply concept of Karya Karana Bhava in Ayurveda.	PO1, PO2, PO9

Table 2 : Contents of Course AyUG-PV

Sr No	A2 List of Topics AyUG-PV Paper I	B2 Term	C2 Marks	D2 Lecture hours	E2 Non-Lecture hours
1	Ayurveda Nirupana 1.1 Lakshana of Ayu, composition of Ayu. 1.2 Lakshana of Ayurveda. Swaroopa and Prayojana of Ayurveda 1.3 Lakshana and classification of Siddhanta. 1.4 Introduction to Basic Principles of Ayurveda and their significance.	I	25	5	6
2	Padartha and Darshana Nirupana 2.1 Padartha Lakshana, Enumeration and classification of Padartha, Bhava and Abhava Padartha, Padartha according to Acharya Charaka (Karana-Padartha). 2.2 Etymological derivation of the word “Darshana”. Classification and general introduction to 9 Schools of Indian Philosophy with an emphasis on: Nyaya, Vaisheshika, Sankhya ,Yoga, Meemamsa and Vedanta darshana. 2.3 Ayurveda as unique and independent school of thought (philosophical individuality of Ayurveda). 2.4 Principles and examples in contemporary sciences which will enhance understanding concept of Padartha. 2.5 Relevance of Study of Darshana and Padartha Vignana in Ayurveda	I		10	14
3.	Dravya vijnaneeyam 3.1 Dravya: Lakshana, Classification and Enumeration 3.2 Panchabhuta: Various theories regarding the creation (theories of Taittiriyopanishad, Nyaya-Vaisheshika, Sankhya-Yoga, Sankaracharya, Charaka and Sushruta), Lakshana and qualities of each Mahabhoota. 3.3 Kala: Etymological derivation, Lakshana , division / units and significance. 3.4 Dik: Lakshana ,division and significance. 3.5 Atma: Lakshana, classification, seat, Gunas, Linga according to Charaka, the method / process of knowledge formation (atmanah jnasya pravrittih). 3.6 Purusha: According to Ayurveda - Ativahikapurusha/ Sukshmasharira/ Rashipurusha/ Chikitsapurusha/ Karmapurusha/ Shaddhatvatmakapurusha. 3.7 Manas: Lakshana, Synonyms, Qualities, Objects, Functions, dual nature of mind (ubhayaatmakatvam), as a substratum of diseases,Influence of Panchabhoutika aahara and aushadha (penta-elemental diet)on manas. 3.8 Role of Panchamahabhuta and Triguna in Dehaprakriti and Manasaprakriti respectively. 3.9 Tamas as the tenth Dravya. 3.10 Practical study/Application and Importance of each Kaarana dravya in Ayurveda. 3.11 Principles and examples in contemporary sciences	II	48	14	20

	which will enhance understanding concept of Kaarana dravya.				
4.	Guna vijnaneeyam 4.1 Etymological Derivation, Classification and Enumeration according to various Darshana and Charaka, 4.2 Lakshana and Classification of Sartha Guna, Gurvadiguna, Paradiguna, Adhyatmaguna (41 Guna) 4.3 Gunapradhanyata (Importance of Guna) 4.4 Practical / clinical application of each Guna in Ayurveda 4.5 Principles and examples in contemporary sciences which will enhance understanding concept of Guna.	**II**		**4**	**6**
5.	Karma vijnaneeyam 5.1 – Introduction of concept of Karma According to Darshanaand Ayurveda – Classification of Karma 5.3 - Practical application of karma 5.4 - Principles and examples in contemporary sciences which will enhance understanding concept	**II**		**2**	**4**
6.	Samanya vijnaneeyam 6.1 – Introduction of concept of Saamaanya According to Darshana and Ayurveda. – Classification of Saamaanya 6.3 - Practical application of saamaanya 6.4 - Principle and examples in contemporary sciences which will enhance understanding theconcept of Saamanya.	**III**	**27**	**3**	**6**
7.	Vishesha vijnaneeyam 7.1 – Introduction of concept of Vishesha according to Darshana and Ayurveda 7.2 - Classification of Vishesha 7.3 - Practical Application of vishesha 7.4- Principles and examples in contemporary sciences which will enhance understanding the concept of Vishesha	**III**		**3**	**6**
8.	Samavaya vijnaneeyam 8.1 – Introduction of concept of Samavaaya According toDarshana and Ayurveda. 8.2 – Practical application of Samavaaya 8.3- Principles and examples in contemporary sciences which will enhanceunderstanding theconcept of Samavaya	**III**		**2**	**4**
9	Abhava vijnaneeyam 9.1 – Introduction of concept of Abhaava According to Darshana and Ayurveda. 9.2 – Classification of Abhaava. 9.3 – Practical application of Abhaava 9.4- Principles and examples in contemporary sciences which will enhance understanding the concept of Abhava.	**III**		**2**	**4**

Paper II					
	A2 List of Topics – AyUG-PV	**B2 Term**	**C2 Marks**	**D2 Lecture hours**	**E2 Non-Lecture hours**
1	Pariksha 1.1. Definition, Significance, Necessity and Use of Pariksha. 1.2. Definition of Prama, Aprama, Prameya, Pramata, Pramana. 1.3. Significance and importance of Pramana, Enumeration of Pramana according to different schools of Philosophy. 1.4. Four types of methods for examination in Ayurveda (Chaturvidha-Parikshavidhi), Pramana in Ayurveda. 1.5. Subsudation of different Pramanas under three Pariksha. 1.6. Practical application of methods of examination (Parikshavidhi) in Nidan and Chikitsa.	I	26	6	12
2	**2. Aptopdesha Pariksha/Pramana** 2.1. Lakshana of Aptopadesha, Lakshana ofApta. 2.2. Lakshana of Shabda, and its types. 2.3. Shabdavritti-Abhidha, Lakshana, Vyanjana and Tatparyakhya.Shaktigrahahetu. 2.4. Vaakya: Characteristics, Vaakyarthajnanahetu- Aakanksha, Yogyata, Sannidhi. **2.5.** Importance of Aptopadesha in maintaining Health, Prevention of Diseases, Diagnostics, Therapeutics and Research.	**I**		6	10
3.	**3. Pratyaksha Pariksha/Pramana** 3.1. Lakshana of Pratyaksha, types of Pratyaksha- Nirvikalpaka- Savikalpaka with description, description of Laukika and Alaukika types and their further classification. 3.2. Indriya-prapyakaritvam, six types ofSannikarsha. 3.3. Indriyanam lakshanam, classification and enumeration of Indriya. Description of Panchapanchaka, Penta-elemental nature of Indriya (*Panchabhautikatwa* of Indriya) and similarity in sources (*Tulyayonitva*) ofIndriya. 3.4. Trayodasha Karana, dominance ofAntahkarana. 3.5. Hindrances in direct perception (*pratyaksha-anupalabdhikaarana*), enhancement of direct perception (Pratyaksha) by various	**II**	42	8	14

	instruments/ equipments, necessity of other Pramanas in addition to Pratyaksha. 3.6. Practical study/ application of Pratyaksha in Sharir, Nidan (Diagosis), Chikitsa(Treatment) and Anusandhan (Research).				
4.	**4. Anumanapariksha/Pramana** 4.1. Lakshana of Anumana. Introduction of Anumiti, Paramarsha, Vyapti, Hetu, Sadhya, Paksha, Drishtanta. Types of Anumana mentioned by Charaka and Nyayadarshana. 4.2. Characteristics and types of Vyapti. 4.3. Lakshana and types of Hetu, Description of Ahetu and Hetwabhasa. 4.4. Characteristics and significance of Tarka (logic). 4.5. Practical study/ application of Anumanapramana in Sharir, Nidan, Chikitsa and Anusandhan.	II		10	15
5.	**5. Yuktipariksha/Pramana** 5.1. Lakshana and description. 5.2. Importance in Ayurveda. 5.3. Practical study and utility in diagnostics, therapeutics and research.	III	32	2	2
6.	**6. UpamanaPramana** 6.1. Lakshana. **6.2.** Application in Sharir, diagnostics, therapeutics and research.	III		2	4
7.	**Karya- Karana Siddhanta** 7.1. Lakshana of Karya and Kaarana. Types of Kaarana. 7.2. Significance of Karya and Kaarana in Ayurveda. 7.3. Different opinions regarding the manifestation of Karya from Kaarana: Satkaryavada, Parinamavada, Vivartavada, Asatkaryavada, Arambhavada, Paramanuvada, Kshanabhanguravada, Pilupaka, Pitharpaka, Anekantavada, Swabhavavada, Swabhavoparamavada. Importance/ Utility of each of these in Ayurveda 7.4 Study of cause effect relationship, causality, causation in Contemporary sciences.	III		11	13

Table 3: Learning objectives (Theory) of Course AyUG-PV

Paper I									
A3 Course outcome	**B3 Learning Objective (At the end of the session, the students should be able to)**	**C3 Domain/sub**	**D3 Must to know/ desirable to know/Nice to know**	**E3 Level Does/ Shows how/ Knows how/ Know**	**F3 T-L method**	**G3 Assessment**	**H3 Formative /summative**	**I3 Term**	**J3 Integration**
Topic 1- Ayurveda Nirupana Time (Lecture: - _5 hours Non lecture 6 hours)									
CO1	Describe the Nirukti (etymology) and Definition of Ayu	Cognitive/ Recall	Must Know	Knows	Lecture Group discussion	Written and Viva	F and S	I	
CO1	Describe the components of Ayu	Cognitive/ Recall	Must Know	Knows	Lecture Group Discussion Enquiry Based learning	Written and Viva	F and S	I	
CO1	Explain Synonyms of Ayu with their meaning and importance	Cognitive Recall	Must Know	Knows	Lecture Group Discussion	Written and Viva	F and S	I	
CO1	Distinguish between 4 types Ayu namely Sukhayu, Dukhayu, Hitayu, Ahitayu	Cognitive Comprehension	Must Know	Knows	Lecture Group Discussion/ Problem Based Learning	Written and Viva, Quiz	F and S	I	
CO1	Realises that the balance between hitayu	Affective	Must know	Knows	Group Discussion/	viva	F	I	

	and Sukhayu will offer better living				Debate				
CO1	Describe Lakshana of Ayurveda and Enlist Synonyms of Ayurveda	Cognitive Recall	Must Know	Knows	Lecture Group Discussion	Written and Viva	Fand S	I	
CO1	Explain different Swarupa of Ayurveda and Discuss Ayurveda Prayojana	Cognitive Comprehension	Must Know	Knows	Lecture Group Discussion/Problem Based Learning	Written and Viva Open Book Test	F and S	I	
CO1	Explain Trisutra of Ayurveda and discuss Nityatva (eternity) of Ayurveda	Cognitive Comprehension	Must Know	Knows	Lecture Group Discussion/ Debate	Written and Viva	F and S	I	
CO1, CO 2	Define Siddhanta	Cognitive Recall	Must Know	Knows	Lecture Presentation Discussion	Written and Viva	F and S	I	
CO1, CO 2	Distinguish the types of Siddhanta	Cognitive Comprehension	Must Know	Knows	Lecture Group Discussion/ Enquiry Based Learning	Written and Viva, Puzzle	F and S	I	
CO1, CO 2	Elaborate the Basic Principles of Ayurveda like Lokapurusha Samya Siddhanta Panchamahabhoota Siddhanta Tridosha Siddhanta Samanya Vishesha Siddhanta Karya Karana Siddhant	Cognitive Comprehension	Must Know	Knows	Lecture/ Group Discussion /Problem Based Learning/ Flipped Classroom	Written and Viva, quiz PBA CBA	F and S	I	

CO1, CO 2	Justify the Application of Basic Principles in Ayurveda	Affective	Must know	Knows	Lecture Demonstration/ Group Discussion	Written and Viva	F and S	I	
CO1, CO 2	Recite the concern verses from Tarkasangraha and Charak Samhita	Cognitive Recall	Desirable to know	Kmows	Audio clips, classroom recitation	Viva, recitation competition	F and S	I	
Topic 2- Padartha and Darshana Nirupana **Time** (Lecture:- _10__ hours Non lecture __14_hours)									
CO1, CO 2	Classify padartha, differentiate bhava, abhava padartha and Appreciate Shat karana of Acharya Charaka.	Cognitive Recall	Must Know	Knows	Lecture/ Discussions PBL	Written and Viva, puzzle	F & S	I	
CO1, CO 2	Discuss similarity and dissimilarity of padartha	Cognitive Comprehension	Desirable to Know	Knows	Lecture/ Discussions/ Activity based learning	Written and Viva	F & S	I	
CO2	Explain nirukti and vyakhya (definition) of darshana	Cognitive Recall	Must Know	Knows	Lecture	Written and Viva	F & S	I	
CO2	Describe Origin of darshana and Explain Importance of darshana (prayojana)	Cognitive Comprehension	Must know	Knows how	Lecture / Group Discussion	Written and Viva, Quiz	F & S	I	
CO1, CO 2	Analyse terms viz - philosophy, metaphysics, aesthetics, epistemology, psychology in relation with darshana	Cognitive Comprehension	Nice to know	Knows	Lecture / Group Discussion/ Activity Based learning	Written and Viva	F & S	I	
CO2	Classify darshana and differentiate between asthika, nasthika, asthikanasthika	Cognitive Recall	Must Know	Knows	Lecture / Enquiry Based Learning	Written and Viva	F & S	I	

	darshana								
CO1, CO 2	Enumerate darshana relevant for Ayurveda study and mention the pioneers of each darshana	Cognitive Recall	Must Know	Knows	Lecture/ Role play/Group Discussion	Written and Viva, Puzzle	F & S	I	
CO1, CO 2	Outline the reason for study of darshana in Ayurveda and Comprehend Philosophical foundation of Ayurveda	Cognitive Comprehension	Must Know	Knows how	Lecture/ Problem Based Learning/ Group discussion/Tutorial	Written and Viva, Open Book Test	F & S	I	
CO2	Explain meaning of nyaya and synonyms of nyayadarshana	Cognitive Recall	Must Know	Knows	Lecture Group discussion	Written and Viva	F & S	I	
CO2	Enumerate nyayoktha 16 padarthas, 12 prameyas	Cognitive Recall	Desirable to Know	Knows	Lecture /Enquiry Based Learning	Written and Viva	F & S	I	
CO2	Recall the content of nyaya sutra	Cognitive Recall	Nice to know	Knows	Lecture	Written and Viva	F & S	I	
CO2	Outline salient features of nyayadarshana viz- chaturvida pramana, pitharapaka, arambhavada.	Cognitive comprehension	Must Know	Knows	Lecture/ Group discussion / Activity Based Learning	Written and Viva , Quiz	F & S	I	
CO2	Explain meanings of vaisheshika and synonyms	Cognitive Recall	Must Know	Knows	Lecture/	Written and Viva	F & S	I	
CO2	Recall the content of vaisheshika sutra	Cognitive Recall	Nice to Know	Knows	Lecture	Written and Viva	F & S	I	

CO2	Identify salient features of vaisheshika darshana viz-shatpadartha, paramanuvada, peelupakavada	Cognitive comprehension	Must Know	Knows	Lecture group discussion/Activity based learning	Written and Viva, quiz, puzzle	F & S	I	
CO2	Explain the meaning of sankhya	Cognitive Recall	Must Know	Knows	Lecture	Written and Viva		I	
CO2	Enumerate, define and categorise 25 tatvas	Cognitive Recall	Must Know	Knows	Lecture discussion	Written and Viva puzzle	F & S	I	
CO2	Recall the trividhadukha, triguna, satkaryavada	Cognitive Recall	Must Know	Knows	Lecture/ Inquiry based learning	Written and Viva	F & S	I	
CO2	Define yoga and explain ashtangayoga	Cognitive comprehension	Must Know	Knows	Lecture Group discussion/demonstration	Written and Viva, quiz	F & S	I	
CO2	Recall content of yoga sutra	Cognitive Recall	Nice to know	Knows	Lecture	Written and Viva	F & S	I	
CO2	Enumerate chittavrutti, panchaklesha, ashtasiddhi	Cognitive Recall	Must Know	Knows	Lecture Debate /Group Discussion	Written and Viva, quiz	F & S	I	
CO2	Recall different type of yoga	Cognitive Recall	Nice to know	Knows	Lecture Self-Directed learning/Activity based learning	Written and Viva, open book test	F & S	I	
CO1, CO 2	Outline the salient features of meemamsa darshana and Vedanta darshana Viz. karma siddhanta, atma, maya, vivartavada,	Cognitive comprehension	Must Know	Knows	Lecture Group Discussion/ Debate	Written and Viva, Quiz	F & S	I	

CO1, CO 2	Explain similarity between Nyaya, vaisheshika, Sankyha, yoga, meemamsa and Vedanta darshana with Ayurveda	Cognitive comprehension	Must Know	Knows how	Lecture discussion PBL/ Flip classroom	Written and Viva	F & S	I	
CO1, CO 2	Explain Charvaka, Jaina and Bouddha darshana and their influence in Ayurveda	Cognitive comprehension	Must Know	Knows	Lecture Group Discussion	Written and Viva	F & S	I	
CO1, CO 2	Demonstrate Ayurveda as unique and independent school of thought (philosophical individuality of Ayurveda).	Cognitive Comprehension Affective	Must Know	Knows how/	Lecture/ Group Discussions PBL	Written and Viva	F & S	I	
CO 1 CO 2	Compare the the Srishtiutpatti krama by different darshanas with contemporary theories like- Big Bang, The multiverse, brane world, the hylographic universe, Simulation theory etc	Cognitive Comprehension	Nice to Know	Knows	Lecture with Videos, Group discussion/ self learning	Puzzle, viva	F	I	
CO 1	Respect ancient philosophy and Ayurveda	Affective	Must know	Know	Discussion	Discussion Debate	F	I	
CO1, CO 2	Enumerate padartha according to different schools of thought	Cognitive Recall	Desirable to Know	Knows	Lecture Group Discussion	Written and Viva, Puzzle	F & S	I	
CO1, CO 2	Find principles and examples in contemporary sciences	Cognitive/ Comprehension	Nice to know	knows	Lecture/ Discussions/ Self-learning,	-	F	I	

	which will enhance understanding concept of Padartha. For ex- matter and energy.								
CO1, CO 2	Analyse role of padartha in darshana and in Ayurveda and Demonstrate the role of Padarthavijnana in Ayurveda	Cognitive / Comprehension	Must Know	Knows how	Lecture/ Seminars /PBL	Written and Viva, Open Book Test	F & S	I	
CO2	Recite concern verses	Cognitive Recall	Desirable to know	kmows	Edutainment Audio clips, classroom recitation	Viva, recitation competition	F&S	I	
Topic-3 Dravya vijnaneeyam Time (Lecture:- __14_ hours Non lecture _20__hours)									
CO3	Explain Nirukti and Paribhasha (definition) of Dravya	Cognitive Recall	Must Know	Knows	Lecture	Written and Viva	F and S	II	
CO3	Classify Dravya and Differentiate between Karana and Karya dravya	Cognitive Recall	Must Know	Knows	Lecture Group Discussion/ Enquiry Based Learning	Written and Viva, Puzzle	F and S	II	
CO3	Enumerate Darvya as per different schools of thoughts	Cognitive Recall	Must Know	Knows	Lecture Group Discussion	Written and Viva, puzzle	F and S	II	
CO3, CO1	Value Practical application of study of Dravya in Ayurveda	Affective	Desirable to know	Knows how	Lecture Group Discussion	Written and Viva	F and S	II	
CO3	Explain the various theories (theories of Taittiriyopanishad, Nyaya-Vaisheshika,	Cognitive/ Comprehension	Must Know	Knows	Lecture Group Discussion /Activity Based	Written and Viva, Quiz	F and S	II	

	Sankhya-Yoga, Sankaracharya, Charaka and Sushruta) regarding creation of Panchamahabhoota				Learning				
CO3	Describe Prithvi Mahabhoota Explain qualities of Prithvi Mahabhoota	Cognitive / Comprehension	Must Know	Knows	Lecture Seminar/ Group Discussion	Written and Viva	F and S	II	
CO3	Describe Aap Mahabhoota Explain qualities of Ap Mahabhoota	Cognitive, Comprehension	Must Know	Knows	Lecture Seminar/ Group Discussion	Written and Viva	F and S	II	
CO3	DescribeTeja Mahabhoota Explain qualities of Teja Mahabhoota	Cognitive, Comprehension	Must Know	Knows	Lecture Seminar/ Group Discussion	Written and Viva	F and S	II	
CO3	Describe Vayu Mahabhoota Explain qualities of Vayu Mahabhoota	Cognitive, comprehension	Must Know	Knows	Lecture Seminar/ Group Discussion	Written and Viva	F and S	II	
CO3	Describe Aakash Mahabhoota. Explain qualities of Aakash Mahabhoota	Cognitive, Comprehension	Must Know	Knows	Lecture Seminar/ Group Discussion	Written and Viva	F and S	II	
CO3, CO1	Value Practical application of Panchamahabhoota in Ayurveda	Affective	Must know	Knows	Lecture Group Discussion, Demonstration	Written and Viva, Open Book Test	F and S	II	

CO2	Compare elementary particles/subatomic particles with Tanmatra/triguna.	Cognitive/ Recall	NK	Know	Video clips, discussions SDL	Quiz	F	II	
CO3, CO1	Define the term *Kala* from various *darshanas* and *Ayurveda.*	Cognitive/ Recall	Must know	Knows	Lecture	Written and Viva	F & S	II	
CO3	Explain classification/types of *Kala*	Cognitive/ Recall	Must know	Knows	Lecture	Written and Viva	F & S	II	
CO3, CO1	Find illustrations of kala explained in Ashtang Hridaya.	Cognitive/ Comprehension	Must know	Knows	Lecture /Activity Based Learning	Written and Viva	F & S	II	
CO3, CO2 CO1	Give examples of importance of Kala in Ayurveda and time as per contemporary sciences	Cognitive/ Recall	Must know	Knows how	Problem Based Learning/ Group Discussion	Written and Viva, Quiz	F & S	II	
CO3	Define *the term Dik*. Explain classification/ division of *Dik.*	Cognitive/ Recall	Must know	Knows	Lecture /Activity Based Learning	Written and Viva, puzzle	F & S	II	
CO3, CO1	Illustrate significance of *Dishas* in Ayurveda with examples.	Cognitive/ Comprehension	Must know	Knows how	Lecture /Seminar	Written and Viva	F & S	II	
CO3	Find illustrations of Dik explained in Ashtangahridaya.	Cognitive/ Comprehension	Must know	Knows how	Group Discussion	Written and Viva, Open book test	F & S	II	
CO3	Define the term Atma,	Cognitive/ Recall	Must know	Knows	Lecture	Written and Viva	F & S	II	
CO3	Explain atma at different levels, seat, Gunas of Atma,	Cognitive/ Recall	Must know	Knows	Lecture	Written and Viva	F & S	II	

CO1 CO3	Explain Atma Linga according to Charaka Samhita.	Cognitive/ comprehension	Must know	Knows	Lecture / Flipped Classroom	Written and Viva	F & S	II	
CO3	Describe the method / process of knowledge formation (*atmanah jnasya pravrittih*).	Cognitive/ Comprehension	Must know	Knows how	Lecture/ Demonstration/	Written and Viva	F & S	II	
CO3	Describe Purusha as mentioned in Ayurveda	Cognitive/ Recall	Must know	Knows	Lecture	Written and Viva	F & S	II	
CO3	Differentiate Ativahikapurusha/ Sukshmasharira/ Rashipurusha/ Chikitsapurusha/ Karmapurusha/ Shad-dhatvatmaka-purusha.	Cognitive/ Comprehension	Must know	Knows how	Lecture / Group discussions	Written and Viva	F & S	II	
CO3	Recognize and state significance of Atmavijnanam	Affective	Desirable to know	Knows	Group Discussions/ Problem Based Learning	viva	F	II	
CO3	Define term Manas, Enlist synonyms, Explain it's Guna. Karma, Vishay. Explain dual nature of mind. (*ubhayaatmakatvam*),	Cognitive/Recall and Comprehension	Must know	Knows	Lecture / Activity Based Learning/Debate	Written and Viva. Puzzle	F & S	II	
CO3	Explain influence of Panchabhoutika aahara and aushadha (penta-elemental diet) on manas	Cognitive/ Recall	Must know	Knows how	Lecture/ discussions/ PBL	Written and Viva. Open Book Test	F & S	II	

CO3	Recognizes the utility of Knowledge of Mana	Affective	Must Know	Knows	Case Based learning	viva	F &S	II	
CO3, CO1	Explain Concept of mind in other sciences.	Cognitive/ Recall	Nice to know	Knows	Discussions/ Videos	Written and Viva	F	II	
CO1	Explain Role of Panchamahabhuta and Triguna in Dehaprakriti and Manasaprakriti respectively.	Cognitive/ Comprehension	Must know	Knows how	Lecture / discussions/ C B L	Written and Viva	F & S	II	
CO3	Discuss the role of Tamas as the tenth Dravya	Cognitive/Comprehension	Desirable to know	Know	Lecture Edutainment Role Play	Written and Viva	F & S	II	
CO3	Realize Practical application of study of dravya in Ayurveda	Affective	Desirable to know	Know	Group Discussions/ Case Base Learning/ Demonstration.	Written and Viva, quiz	F & S	II	
CO3	Recite Dravya Granth of Tarka Sangrah& defn from Charak	Cognitive Recall	Desirable to know	kmows	Audio clips/ classroom recitation	Viva, Recitation Competetion	F&S		
CO3. CO2	Discuss principles and examples in contemporary sciences which will enhance understanding the concept of Karana dravya. For ex- Quantum Physics	Cognitive/Comprehension	Nice to know	Know	Lecture/ Discussions/ Self-learning activity	Open book testh	F	II	
Topic -4 Guna vijnaneeyam Time (Lecture:-4 hours Non lecture 6 hours)									
CO3	Define Guna and classify Guna according to various Darshanas and Charaka Samhita	Cognitive Recall	Must know	knows how	Lecture /Demonstration	Written and Viva	F&S	II	

CO3	Explain the Lakshana of indriyartha Gunas with examples.	Cognitive Comprehension	Must know	Knows how	Lecture / Group Discussion	Written and Viva	F&S	II	
CO3	Discuss the Lakshana of Gurvadi Guna with examples.	Cognitive Comprehension	Must know	Knows how	Lecture /Seminar/ Group Discussion	Written and Viva, puzzle	F&S	II	
CO3	Explain the Lakshana of Paradi Guna with examples.	Cognitive Comprehension	Must know	Knows how	Lecture /Seminar/ Group Discussion	Written and Viva, Puzzle	F&S	II	
CO3	Describe the Lakshana of Adhyatma Guna with examples.	Cognitive Comprehension	Must know	Knows how	Lecture /Seminar/ Group Discussion	Written And Viva	F&S	II	
CO3	Appreciate the importance of Guna (Gunapradhanyata)	Affective	Must know	Knows	Discussion	Written Discussion viva	F&S	II	
CO3	Describe the practical application of Indriyartha Gunas in diagnosis of disease and Treatment	Cognitive Comprehension	Must know	Knows how	Lecture / Demonstration/ Case based learning	Written And Viva	F&S	II	
CO3	Describe the practical application of Gurvadi Guna in diagnosis of disease and Treatment	Cognitive Comprehension	Must know	Knows how	Lecture / Demonstration/ Case based learning	Written And Viva	F&S	II	
CO3	Describe the practical application of Paraadi Gunas.	Cognitive Comprehension	Must know	Knows how	Lecture / Demonstration/ Activity based learning	Written And Viva	F&S	II	

CO3	Describe the practical application of Adhyatma Guna .	Cognitive Comprehension	Must know	knows how	Lecture / Demonstration/ Problem Based Learning	Written And Viva	F&S	II	
CO3	Recite the concern verses from TarkaSangrah and Charak Samhita	Cognitive Recall	Desirable to know	kmows	Audio clip/ classroom recitation	viva	F&S Recitation competition	II	
CO1 CO2	Discuss Principles and examples in contemporary sciences which will enhance understanding the concept of Guna.	Cognitive Comprehension	Nice to know	Knows	Lecture/ Discussions/ Self-learning activity	-	F	II	
Topic - 5. Karma vijnaneeyam Time (Lecture:- __2_ hours Non lecture _4__hours)									
CO3	Define *Karma* acco. to *various Darshana* and *Ayurveda*.	Cognitive Recall	Must know	Knows	Lecture	Written And Viva	F&S	II	
CO3	Compare the *Karma Lakshana* (characteristics) from *Charaka Samhita* and Darshana	Cognitive Comprehension	Must know	Knows	Lecture/ Group discussion/ Flipped Classroom	Written And Viva	F&S	II	
CO3	Explain the types of *Karma*	Cognitive Comprehension	Must know	Knows	Lecture and discussion, demonstration	Written And Viva	F&S	II	
CO3	Describe the process of production and destruction of *Laukika Karma* with one	Cognitive Comprehension	Desirable to know	Knows how	Lecture and demonstration	Written And Viva	F&S	II	

	example.								
CO3	Describe the *Adhyaatmika* karma and its causal relationship with health and disease.	Cognitive Comprehension	Must know	Knows how	Lecture and discussion	Written And Viva	F&S	II	
CO3	Enlist the other types of processes or pharmacological actions which came under the title of *Karma* in *Ayurveda*. Viz: *Panchakarma, Shastrakarma, Lekhana, Bruhana* etc.	Cognitive Recall	Must know	Knows how	Lecture and discussion/ Self Directed Learning	Written And Viva	S	II	
CO3	Recite the concern verses from TarkaSangrah and Charak Samhita	Cognitive Recall	Desirable to know	kmows	Audio clip/ classroom recitation/ Edutainment	viva	F&S Recitation competition	II	
CO1 CO2	Discuss principles and examples in contemporary sciences which will enhance understanding the concept of Karma.	Cognitive Recall	Nice to know	Knows	Lecture/ Discussions/ Self-learning	-	F	II	
Topic - 6 . Samanya vijnaneeyam **Time** (Lecture:- _3__ hours Non lecture _6__hours)									
CO3	Explain the Samanya(According to *Ayurveda &Darshana*)	Cognitive Comprehension	Must know	Knows	Lecture	Written And Viva	F&S	III	
CO3	Distinguish the *Samanya* concept of *Ayurveda* from	Cognitive Comprehension	Must know	Knows	Lecture and discussion	Written And Viva	F&S	III	

	Darshana.								
CO3	Describe the *Anuvrutti Buddhi*	Cognitive Recall	Desirable to know	knows	Lecture and discussion	Written	F & S	III	
CO3	Explain the types of *Samanya* (Acc. To *Ayurveda* and *Darshana*)	Cognitive Recall	Must know	Knows	Lecture and discussion/ Flipped Classroom	Written And Viva	F & S	III	
CO3	Explain the importance of samanya in diagnosis and treatment	Cognitive Comprehension	Must know	Knows	Lecture and discussion/Case Based Learning	Written And Viva ,Quiz	S	III	
CO3	Identify the examples of *Dravya-guna-karma Samanya* with each *DOSHA-DHATU-MALA*	Cognitive Comprehension	Must know	Knows how	Lecture and Demonstration/ Group Discussion	Written And Viva , Open Book Test	S	III	
CO3	Recite the concern verses from TarkaSangrah and Charak Samhita	Cognitive Recall	Desirable to know	kmows	Audio clip/ classroom recitation	viva	F&S Recitation competition		
CO1	Discuss principle and examples in contemporary sciences which will enhance understanding the concept of Samanya. For ex-system biology	Cognitive Comprehension	Nice to know	knows	Self -Directed learning	-	F	III	
Topic - 7 . Vishesh vijnaneeyam **Time** (Lecture:- __3_ hours Non lecture __6_hours)									
CO3	Explain Vishesha According to *Ayurveda* &*Darshana*	Cognitive Comprehension	Must know	Knows	Lecture and Group Discussion	Written And Viva	F&S	III	

CO3	Distinguish *Vishesha* concept of *Ayurveda* from *Darshana*.	Cognitive Comprehension	Must know	Knows	Lecture and Group Discussion	Written and Viva	F&S	III	
CO3	Describe the *Vyavrutti Buddhi*	Cognitive Recall	Desirable to know	knows	Lecture and discussion	Written	F & S	III	
CO3	Explain *Vishesha* in the context of *Mahabhoota Paramanu*	Cognitive Recall	Nice to know	knows	Lecture	Written	F & S	III	
CO3	Discuss the *Viruddha Vishesha* and *Aviruddha Vishesh aand other types of Vishesha*	Cognitive Comprehension	Must know	Knows how	Lecture and discussion, demonstration	Written And Viva	F&S	III	
CO3	Explain the statement "*Pravruttirubhayasyatu* "	Cognitive Comprehension	Must know	Knows how	Lecture, Problem Based Learning	Written Viva	F&S	III	
CO3	Provide different classifications of vishesha and their utility in Diagnosis and Treatment.	Cognitive recall	Must know	Knows how	Lecture/ Activity Based Learning	Written, Viva, Open Book Test	F&S	III	
CO3	Identify the examples of *Dravya-guna-karma Vishesha* with each *DOSHA-DHATU-MALA*	Cognitive Comprehension	Must know	Knows how	Lecture and demonstration/ Game Based Learning	Written And Viva Quiz	S	III	
CO1, CO2	Describe principles and examples in contemporary sciences which will enhance understanding the concept of Vishesha For ex- System Biology	Cognitive Comprehension	Nice to know	knows	Lecture/ Discussions/ Self-learning activity	viva-	F	III	

CO3	Recite the concern verses from TarkaSangrah and Charak Samhita	Cognitive Recall	Desirable to know	kmows	Audio clip/ classroom recitation	viva	F&S Recitation on competition	III	
Topic - 8. Samavay vijnaneeyam **Time** (Lecture:- __2_ hours Non lecture _4__hours)									
CO3	Explain Samavaya (Acc. To *Ayurveda* and *Darshana*)	Cognitive Recall	Must know	Knows	Lecture	Written And Viva	F&S	III	
CO3	Describe the eternal relation between ayutasiddhavritti	Cognitive Comprehension	Must know	Knows how	Lecture and demonstration	Written And Viva	F&S	III	
CO1 CO2	Discuss principles and examples in contemporary sciences which will enhance understanding the concept of Samavaya	Cognitive Recall	Nice to know	knows	Lecture/ Discussions/ Self-learning activity	-	F	III	
CO3	Recite the concern verses from TarkaSangrah and Charak Samhita	Cognitive Recall	Desirable to know	kmows	Audio clip/ classroom recitation	Viva, Recitation competition	F&S		
Topic - 9. Abhav vijnaneeyam **Time** (Lecture:- __2_ hours Non lecture __4_hours)									
CO3	Define *Abhava*	Cognitive Recall	Must know	Knows	Lecture and discussion	Written And Viva	F&S	III	
CO3	Discuss the supportive and contradictory views for the acceptance of *Abhava* as a *Padartha*	Cognitive comprehension	Must know	Knows How	Lecture Group Discussion/ debate	Written And Viva	F&S	III	
CO3	Explain the view of *Ayurveda* about *Abhava*	Cognitive Recall	Must know	Knows	Lecture demonstration	Written And Viva	F&S	III	

CO3	Explain the four types of *Abhava*	Cognitive Recall	Must know	Knows	Lecture ,Activity Based Learning	Written And Viva , Puzzle	F&S	III	
CO3	Demonstrate the utility of the knowledge of *Abhava* in Ayurveda	Cognitive Comprehension	Must know	Knows how	Lecture, Group discussions Problem Based Learning	Written And Viva	F&S	III	
CO1 CO2	Discuss principles and examples in contemporary sciences which will enhance understanding the conceptof Abhava	Cognitive Recall	Nice to know	knows	Lecture/ Discussions/ Self-learning activity	-	F	III	
CO3	Recite the concern verses from TarkaSangrah and Charak Samhita	Cognitive Recall	Desirable to know	kmows	Audio clip/ classroom recitation	viva	F&S Recitation competetion		
Paper II									
Topic 1- (Pariksha) Time (Lecture:- 6 hours Non lecture 12 hours)									
CO4	Describe Pariksha	Cognitive/ Recall	Must know	Knows	Lecture/Group Discussion	Written And Viva	F&S	I	
CO4	Explain the necessity & significance of pariksha	Cognitive Comprehension	Must know	Knows how	Lecture/Problem Based Learning/Debate	Written And Viva	F&S	I	
CO4	Describe Buddhi and its classification	Cognitive / Recall	Must know	Knows	Lecture/Activity based learning	Written And Viva	F&S	I	
CO4	Describe Prama, Prameya, Pramata, Pramana and differentiate Prama and Aprama	Cognitive / Recall	Must know	Knows	Lecture/ Activity based learning	Written And Viva, open book test	F&S	I	

CO4	Describe the Significance of Pramana	Cognitive / comprehension	Must know	Knows how	Problem based learning	Written And Viva	F&S	I	
CO4	Enumerate Pramana according to different schools of philosophy.	Cognitive / Recall	Must know	Knows	Lecture	Written And Viva, puzzle	F&S	I	
CO4	Enumerate Pariksha as per Ayurveda.	Cognitive / Recall	Must know	Knows	Lecture/ Enquiry based learning	Written And Viva	F&S	I	
CO4	Describe the Pramana accepted by different schools of Philosophy with one example each.	Cognitive / Recall	Must know	Knows	Lecture/ group discussion	Written And Viva, quiz	F&S	I	
CO4	Describe 4 Pariksha explained by Ayurveda with one example each	Cognitive / Recall	Must know	Knows	Lecture/ activity based learning	Written And Viva, puzzle	F&S	I	
CO4	Justify the inclusion of Pramanas under three Pariksha	Cognitive / Comprehension	Must know	Knows how	Problem based learning and flipped classroom	Written And Viva	F&S	I	
CO4	Describe the practical application of Pariksha Vidhi in Diagnosis and Treatment.	Cognitive / Recall	Must know	Knows	Case based learning/ Group discussion	Written, open book test And Viva	F&S	I	
CO4	Establish that the Pramanas are tool to gain the knowledge	Affective	Must know	knows	Group discussion	Viva	F&S	I	
CO4	Recite the concern Verses from Tarkasangrah & CharakSamhita	Cognitive Recall	Desirable to know	kmows	Audio clips, classroom Recitation	Viva, Recitation competetion	F&S	I	

7. Topic 2- (Aptopdesha Pariksha/Pramana) Time (Lecture:- __6_ hours Non lecture _10__hours)I									
CO 4	Describe Apta and Aptopadesh	Cognitive / Recall	Must know	Knows	Lecture	Written And Viva	F&S	I	
CO 4	Describe the significance of Aptopadesha in Chikitsa	Cognitive / Recall	Must know	Knows	Case based learning/ Group discussion	Written And Viva	F&S	I	
CO 4	Define the term Shabda	Cognitive / Recall	Must know	Knows	Lecture	Written And Viva	F&S	I	
CO 4	Describe types of Shabda	Cognitive / Recall	Must know	Knows	Lecture/ Activity based learning	Written And Viva	F&S	I	
CO 4	Define the term Shaba artha bodhaka Vrutti	Cognitive / Recall	Must know	Knows	Lecture/ group discussion	Written And Viva	F&S	I	
CO 4	Enumerate Shabaartha bodhaka vrutti	Cognitive / Recall	Must know	Knows	Lecture/ Activity based learning	Written And Viva, quiz	F&S	I	
CO 4	Define Abhidha Vrutti with illustration	Cognitive / Recall	Must know	Knows	Lecture/ Activity based learning	Written And Viva	F&S	I	
CO 4	Define Lakshana Vrutti with examples	Cognitive / Recall	Must know	Knows	Lecture/ Activity based learning	Written And Viva	F&S	I	
CO 4	Enumerate the types of Lakshanavrutti and define each of them with example	Cognitive / Recall	Must know	Knows	Lecture/ Activity based learning	Written And Viva	F&S	I	
CO 4	Define Vyanjana vrutti with example	Cognitive / Recall	Must know	Knows	Lecture/ Activity based learning	Written And Viva	F&S	I	
CO 4	Define Tatparyakhya vrutti with	Cognitive / Recall	Must know	Knows	Lecture/ Activity based	Written And Viva	F&S	I	

	example				learning				
CO 4	Define the term Pada with specification to Shakti and enumerate the types of Pada	Cognitive / Recall	Must know	Knows	enquiry based learning	Written And Viva	F&S	I	
CO 4	Enumerate Shaktigraha hetu	Cognitive / Recall	Must know	Knows	Lecture/ group discussion/ Problem based learning	Written And Viva, puzzle	F&S	I	
CO 4	Describe Shakti graha hetu	Cognitive / Recall	Must know	Knows	Lecture/ Tutorial/Problem based learning	Written And Viva	F&S	I	
CO 4	Enumerate Vaakyarthajnana hetu	Cognitive / Recall	Must know	Knows	Lecture/ group discussion/ Problem based learning	Written And Viva, quiz	F&S	I	
CO 4	Define Akanksha with example	Cognitive / Recall	Must know	Knows	Lecture/ Activity based learning/ Problem based learning	Written And Viva	F&S	I	
CO 4	Define Yogyata with example	Cognitive / Recall	Must know	Knows	Lecture/ Activity based learning/ Problem based learning	Written And Viva	F&S	I	
CO 4	Define Sannidhi with example	Cognitive / Recall	Must know	Knows	Lecture/ Activity based learning/ Problem based learning	Written And Viva	F&S	I	

CO 4	Describe importance of Aptopadesha in maintaining Health, Prevention of diseases, diagnostics, therapeutics and research.	Cognitive/ Comprehension	Must know	knows	Lecture/ Activity based learning/ Problem based learning	Written And Viva, open book test	F&S	I	
CO4	Recite the concern Verses from Tarkasangrah & CharakSamhita	Cognitive Recall	Desirable to know	kmows	Audio clips, classroom Recitation	Viva, Recitation competetion	F&S	I	
Topic 3- Pratyaksha Pariksha/Pramana Time (Lecture:- __8_ hours Non lecture _14__hours)									
CO4	Define Pratyaksha	Cognitive / Recall	Must know	Knows	Lecture/ Tutorial/Activity based learning	Written And Viva	F&S	II	
CO4	Enumerate the types of Pratyaksha	Cognitive / Recall	Must know	Knows	Lecture/ Activity based learning	Written And Viva	F&S	II	
CO4	Describe types of Pratyaksha	Cognitive / Recall	Must know	Knows	Lecture/ Activity based learning/ Problem based learning	Written And Viva, quiz	F&S	II	
CO4	Describe Indriya Prapyakaritva Mechanism of sensory perception)	Cognitive / comprehension	Must know	Knows	Lecture/ Flip classroom/ Problem based learning	Written And Viva,	F&S	II	
CO4	Define Sannikarsha	Cognitive / Recall	Must know	Knows	Lecture/ Activity based learning	Written And Viva	F&S	II	

CO4	Describe the types of Sannikarsha	Cognitive / comprehension	Must know	Knows how	Lecture/ Problem based learning	Written And Viva, puzzle	F&S	II	
CO4	Define Indriya	Cognitive / Recall	Must know	Knows	Lecture/ Activity based learning	Written And Viva	F&S	II	
CO4	Enumerate the types of Indriya	Cognitive / Recall	Must know	Knows	Lecture/ role play	Written And Viva	F&S	II	
CO4	Define Jnanendriya	Cognitive / Recall	Must know	Knows	Lecture/ Activity based learning	Written And Viva	F&S	II	
CO4	Enlist the functions of Karmendriya	Cognitive / Recall	Must know	Knows	Problem based learning	Written And Viva	F&S	II	
CO4	Describe the function of Manas in relation to Jnanotpatti	Cognitive / Recall	Must know	Knows	Lecture/ Problem based learning	Written And Viva	F&S	II	
CO4	Justify the role of Manas as ubhayendriya in relation with Jnanotpatti and Karma.	Cognitive / Comprehension	Must know	Knows how	Problem based learning / Group discussion/Debate	Written And Viva, open book test	F&S	II	
CO4	Enumerate Panchapanchaka and describe its significance with respect to Pratyaksha Jnana	Cognitive / Recall	Must know	Knows	Lecture/ Problem based learning / Group discussion	Written And Viva, quiz	F&S	II	
CO4	Enumerate and describe briefly the various theories of Darshana and Ayurveda, which highlight the relationship of Indriya	Cognitive / Comprehension	Must know	Knows	Group discussion/ role play/debate	Written And Viva, open book test	F&S	II	

	and Panchamahabhuta.								
CO4	Justify the specificity of Indriya for perceiving specific Artha	Cognitive / Comprehension	Must know	Knows how	Activity based learning/ Problem based learning / Group discussion	Written And Viva	F&S	II	
CO4	Enumerate Trayodasha Karana	Cognitive / Recall	Must know	Knows	Lecture/Tutorial / Activity based learning	Written And Viva, puzzle	F&S	II	
CO4	Enumerate Antahkarana	Cognitive / Recall	Must know	Knows	Lecture/ Activity based learning	Written And Viva	F&S	II	
CO4	Enumerate the functions of Antahkarana	Cognitive / Recall	Must know	Knows	Lecture/ Activity based learning	Written And Viva	F&S	II	
CO4	Illustrate the role Antahkarana in Jnanotpatti with example to highlight the significance	Cognitive / Comprehension	Must know	Knows how	Lecture/ Problem based learning / Group discussion	Written And Viva, open book test	F&S	II	
CO4	Describe the factors which create hindrance for perception with an illustration (pratyaksha-anupalabdhikaarana)	Cognitive / Comprehension	Must know	Knows	Activity based learning/ Problem based learning / Group discussion	Written And Viva, puzzle	F&S	II	
CO4	Enumerate a few equipments or aids which help in enhancing the direct perception	Cognitive / Recall	Must know	Knows	demonstrations/ Problem based learning / Group discussion	Written And Viva, quiz	F&S	II	
CO4	Justify the necessity of other pramana with textual references and	Cognitive / Application	Must know	Knows how	Lecture/ Activity based learning/	Written And Viva, open book	F&S	II	

	illustrations				Problem based learning / Group discussion	test			
CO4	Describe the practical application of Pratyaksha in Sharir, Nidan, Chikitsa and Anusandhan (research).	Cognitive / comprehension	Must know	Knows	Lecture/ case-based learning / Group discussion	Written And Viva	F&S	II	
CO4	Justify the role Pratyaksha (Observation and interpretation skills for generalization of results) in research	Cognitive / Application	Must know	Knows how	Lecture/ Activity based learning/ Problem based learning / Group discussion	Written And Viva	F&S	II	
CO4	Realizes importance as well as limitation of Pratyaksha	Affective	Must know	Knows	Group discussion	Viva	F&S	II	
CO4	Recite the concern Verses from Tarkasangrah & CharakSamhita	Cognitive Recall	Desirable to know	kmows	Audio clips, classroom Recitation	Viva, Recitation competetion	F&S	II	
Topic 4 - Anumana pariksha/Pramana Time (Lecture:- _10__ hours Non lecture _15__hours)									
CO4	Describe Anumana	Cognitive / Recall	Must know	Knows	Lecture	Written And Viva	F&S	II	
CO4	Define the terms with an example (Anumiti, Paramarsha, Vyapti, Hetu, Sadhya, Paksha, Drishtanta)	Cognitive / Recall	Must know	Knows	Lecture/ enquiry based learning	Written And Viva, quiz	F&S	II	
CO4	Describe the types of anumana	Cognitive / Recall	Must know	Knows	Lecture/ Activity based learning/ group discussion	Written And Viva,	F&S	II	

CO4	Describe Pancha Avayava Vakya	Cognitive / Recall	Must know	Knows	Lecture/ gamification/ Problem based learning / Group discussion	Written And Viva	F&S	II	
CO4, CO2	Associate Contemporary method of carrying out research with Pancha Avayava Vakya	Cognitive / Comprehension	Desirable to know	Knows how	Self directed learning, / Problem based learning / Group discussion	Written And Viva, open book test	F&S	II	
CO4	Define vyapti	Cognitive / Recall	Must know	Knows	Lecture/ Activity based learning	Written And Viva	F&S	II	
CO4	Describe the types of vyapti	Cognitive / Recall	Must know	Knows	Lecture/ Problem based learning	Written And Viva	F&S	II	
CO4	Define hetu	Cognitive / Recall	Must know	Knows	Lecture/ Activity based learning	Written And Viva	F&S	II	
CO4	Describe the types of hetu	Cognitive / Recall	Must know	Knows	group discussion	Written And Viva	F&S	II	
CO4	Enlist Sad-hetu Lakshana	Cognitive / Recall	Must know	Knows	Lecture/ Problem based learning	Written And Viva, quiz	F&S	II	
CO4	Define Hetwabhasa	Cognitive / Recall	Must know	Knows	Lecture/ Problem based learning	Written And Viva	F&S	II	
CO4	Explain the types of Hetwabhasa	Cognitive / Comprehension	Must know	Knows	Lecture/Tutorial group discussion	Written And Viva, puzzle, quiz	F&S	II	
CO4	Describe Ahetu	Cognitive / Recall	Must know	Knows	Lecture/ Activity based learning	Written And Viva	F&S	II	

CO4	Describe Tarkaas per Nyaya Sutra and Tarka Sangraha	Cognitive / Recall	Must know	Knows	Lecture Tutorial/ Problem based learning	Written And Viva, quiz	F&S	II	
CO4	Distinguish between Tarka as Aprama and tool in Anumana	Cognitive / Comprehension	Must know	Knows how	Enquiry based learning/ group discussion/debate	Written And Viva	F&S	II	
CO4	Justify the role of Tarka in Anumana	Cognitive / Comprehension	Must know	Knows how	Activity based learning/ Problem based learning / Group discussion	Written And Viva, open book test	F&S	II	
CO4	Demonstrate the practical applications of Anumana Pariksha (with few examples) in Sharir, Nidan, Chikitsa and Anusandhan (research).	Cognitive / Application	Must know	Knows how	Role play/ Game based learning / Group discussion	Written And Viva, open book test	F&S	II	
CO4	Recite the concern Verses from Tarkasangrah & CharakSamhita	Cognitive Recall	Desirable to know	kmows	Audio clips, classroom Recitation	Viva, Recitation competetion	F&S	I	
Topic 5 - Yukti pariksha/Pramana **Time** (Lecture:- _2__ hours Non lecture _2__hours									
CO4	Describe Yukti	Cognitive / Recall	Must know	Knows	Lecture/ Activity based learning/ Group discussion	Written And Viva	F&S	III	
CO4	Compare Yukti as an independent Pariksha and as a part of Anumana	Cognitive / Comprehension	Must know	Knows how	Lecture/ Activity based learning/ Problem based	Written And Viva, open book test	F&S	III	

					learning / Group discussion				
CO4	Describe the Importance of Yukti in Ayurveda	Cognitive / Recall	Must know	Knows how	Lecture / Activity based learning/ Problem based learning / Group discussion	Written And Viva	F&S	III	
CO4	Describe the practical application of Yukti in Sharir, Nidan, Chikitsa and Anusandhan (research).	Cognitive Recall	Must know	Knows how	Lecture/ Activity based learning/ Problem based learning / Group discussion	Written And Viva	F&S	III	
CO4	Recite the concern Verses from CharakSamhita	Cognitive Recall	Desirable to know	knows	Audio clips, classroom Recitation	Viva, Recitation competition	F&S	III	
8. Topic 6 – Upamana Pramana Time (Lecture:- __2_ hours Non lecture _4__hours)									
CO4	Define Upamana..Enlist the types of Upaman	Cognitive / Recall	Must know	Knows	Lecture/ Activity based learning	Written And Viva	F&S	III	
CO4	Describe the Importance of Upamana in Ayurveda	Cognitive / Recall	Must know	Knows	Lecture/ Problem based learning / Group discussion	Written And Viva	F&S	III	
CO4	Describe the practical applications of Upamana in Sharir, Nidan, Chikitsa and Anusandhan.	Cognitive/ Comprehension	Must know	Knows	Lecture/ Game based learning/ Problem based learning / Group discussion	Written And Viva, quiz	F&S	III	
CO4	Recite the concern Verses from Tarkasangrah & Charak	Cognitive Recall	Desirable to know	kmows	Audio clips, classroom Recitation	Viva, Recitation competition	F&S	III	

Topic 7 - Karya- Karana Siddhanta Time (Lecture:- _11__ hours Non lecture _13__hours)									
CO5 CO2	Define Karya and Karana. List types of Karana. Charakokta Dashvidha Parikshya Bhava.	Cognitive/ Recall	Must know	Knows	Lecture Tutorial	Written and Viva	F & S	III	
CO5	Explain Charakokta Dashvidha Parikshya Bhava.	Cognitive/Comprehension	Must know	Knows	Lecture/Problem Based learning	Written and Viva	F & S	III	
CO5 CO2	Describe the significance of Karya and Kaarana in Ayurveda	Cognitive/ Comprehension	Must know	Knows how	Lecture/problem based activity	Written and Viva	F & S	III	
CO5 CO2	Realises the utility of Charakokta Dashvidha Parikshya Bhav in understanding situations and taking decisions	Affective	Must know	Knows	Group discussion/ Role play/ Debate		F	III	
CO5 CO2	Distinguish different opinions regarding the manifestation of Karya from Karana	Cognitive / Application	Must know	Knows how	Edutainment Role play/ Debate group discussion/debate	Written and Viva, quiz	F & S	III	
CO5 CO2	Analyse Satkaryavada and relate it with Ayurveda Siddhanta	Cognitive / Application	Must know	Knows how	Lecture & Group Discussion/debate	Written and Viva	F & S	III	
CO5 CO2	Analyse Asatkaryavada & relate it with Ayurveda Siddhanta	Cognitive / Application	Must know	Knows how	Lecture & Group Discussion/debate	Written and Viva	F & S	III	

CO5 CO2	Analyse Parinamavada & relate it with Ayurveda Siddhanta	Cognitive / Application	Must know	Knows how	Lecture & Group Discussion	Written and Viva	F & S	III	
CO5 CO2	Analyse Arambhavada & relate it with Ayurveda Siddhanta	Cognitive / Application	Must know	Knows how	Lecture & Group Discussion	Written and Viva	F & S	III	
CO5 CO2	Analyse Paramanuvada and relate it with Ayurveda Siddhanta	Cognitive / Application	Must know	Knows how	Lecture & Group Discussion	Written and Viva	F & S	III	
CO5 CO2	Explain Vivartavada and relate it with Ayurveda Siddhanta	Cognitive/ Comprehension	Must know	Knows how	Lecture & Group Discussion	Written and Viva	F & S	III	
CO5 CO2	Explain Kshanabhangurvada and relate it with Ayurveda Siddhanta	Cognitive/ Comprehension	Must know	Knows how	Lecture & Group Discussion	Written and Viva	F & S	III	
CO5 CO2	Explain Swabhavavada and relate it with Ayurveda Siddhanta	Cognitive/ Comprehension	Must know	Knows how	Lecture & Group Discussion	Written and Viva	F & S	III	
CO5 CO2	Explain Peelupakavada and relate it with Ayurveda Siddhanta	Cognitive/ Comprehension	Must know	Knows how	Lecture & Group Discussion/debate	Written and Viva	F & S	III	
CO5	Explain Pitharapakavada and relate it with Ayurveda Siddhanta	Cognitive/ Comprehension	Must know	Knows how	Lecture & Group Discussion/debate	Written and Viva	F & S	III	
CO5	Explain Anekantavada and relate it with Ayurveda Siddhanta	Cognitive/ Comprehension	Must know	Knows how	Lecture & Group Discussion	Written and Viva	F & S	III	
C05 CO2	Explain Swabhavoparamavada.	Cognitive/ Comprehension	Must know	Knows how	Lecture & Group Discussion	Written and Viva	F & S	III	

CO5 CO2	Recite the concern Verses from Tarkasangrah & CharakSamhita	Cognitive Recall	Desirable to know	kmows	Audio clips, classroom Recitation	Viva, Recitation competition	F&S	III	
CO5, CO2	Value cause and effect theory	Affective	Must know	Knows	Debate/Group Discussion	Viva	F	III	
CO 5, CO2	Analyse cause effect relationship, causality, causation in contemporary sciences	Cognitive / Comprehension	Nice to know	Knows	Self directed learning , Flipped classroom, Group Discussions.	-	-	III	

List of Practicals

Course AyUG-PV : Practical List

Marks: 100

Hours:- 45 (included in non Lecture hours)

SN	Name of Topic/ Name of Practical	Term	Activity / Practical
P1	Ayurved Nirupan	**I**	Ayurved Perception identification: Ask the meaning of Ayurveda to your parents, friends and family members (min 10) and write it, give your opinion on it. Introduction to communication skills. Conduct of survey.
P2	Darshana and Padartha	**I**	• Darshan concept development: Find and write names of different philosophies? • Discussions: meanings of philosophy, darshana, spirituality, religion. Are they same or different? Write in Activity Book.
P3	Hitayu/ Sukhayu lakshanas	I	• Identification of characters of Hitayu, & Sukhayu in Healthy individuals.
P4	Dravya	I	1. **Identification of Guna and Karma.** Make a list of 10 dravyas surrounding you and identify Guna and Karma in it. 2. **Panchbhautik nature identification:** Demonstrate the Panchamahabhuta in any five ahara dravya and five sharira dravya/ avayava with a neat labeled diagramme. (ex-cell, blood, vata, pitta, kapha etc). 3. **Determination of Directions:** Identify the directions in and enlist the content in each direction in your campus. 4. **Conceptualize Time :** Discussion and understanding of Kala as per Ayurved and contemporary sciences. 5. **Categorization** of Aushadhi dravya by dominance of Mahabhoot e.g. Parthiv / Jaleeya/ Agney/ Vayaveey/ Akasheey dravya with reasons. 6. **Early Clinical Exposure(ECE):** Visit the OPD, find the diseases common for different age groups (balyavastha/ tarunyavastha/ vruddhavastha)

P5	Guna	II	**Identification:** **Sartha** Guna : Identify concept of Shabda, Sparsha, Rupa, Rasa, Gandha in Dravya. **Application and demonstration** find the different therapies based on 5 Sartha Gunas. e.g. Gandha. Shabda, Sparsha. Observe /Experience/ Study / Read book or article **present** on (any one) Aromatherapy- Gandha Chikitsa. Music therapy/ Mamtra Chikitsa -Shabda guna. Sparsha- Touch therapy. **Gurvadi** Guna: Identify guna in any five ahara dravya : different vargas. in Sharir dravya: dosha, dhatu mala. **Comparison** Gurvadi gunas and corelate with concepts learned in Physics, Chemistry and Biology. Observation(**survey**) of the effects of Seasons on Gurvadi gunas in body, nature etc. **Paradi** Guna and their application in five examples. **Atma Guna identification:** Making or Framing their real life situations related to Atma Guna(sukha, dukkha etc)
P6	Karma	II	**Conceptualization** Karma, its application in branch of Ashtanga Ayurveda.(panchakrma/ Shastrakarma etc **Illustration**: Make a collage of pictures/ photos depicting five types of karma and their similarity with concepts learned in Physics, Chemistry etc.
P7	Pratyaksha Praman	II	**Observation**: Note down the factors from Prakruti analysis which you can

			understand through pratyaksh (like- colour, dry skin) **Identification**: Find few identification marks for identification of herbs/ minerals which need Pratyaksha. **ECE**: Pramans in examination of patient and Diagnosis of disease. Identifies the gunas which can be perceived by one sense (ekendriya) organ and more than one sense organ (Dwiendriya etc). Demonstrate with examples of Shabda,(snigdha/ ruksha etc) Sparsha (snigdha/ ruksha etc), Rupa, Rasa(taste threshold video), Gandha. (5 examples)
P8	Pratyaksha Praman Limitations	II	**Observation**: Find out how one can overcome limitations of Pratyaksha by advances in equipment. (microscopre, telescope etc) **Justification** of use of various equipment in examination of patient and Diagnosis of disease. (X ray, USG etc)
P9	Anuman Praman	II	**Application in Real life situation** Write 3 examples of Vyapti (associations)in real life. Find and explain 5 examples of Anumana pramana as per types. Write 3 examples of panchavayava vakya. Correlate it with practicals that you have conducted. Examples of Hetvabhas.(Any three) Study use of inference in various sciences.
P10	Samanya Vishesh Siddhant	III	**Identification**: Visit vanaushadhi udyan of your college. Find samanyatva and visheshatva among plants. **Illustration** : Make a chart of food articles and activities to illustrate the relationship of samanya/vishesha with dosha-dhatu-malas. **Application**: Make a list/ collection of seasonal vegetables and fruits which are

			Samanya/Vishesha with the dosha.(five examples)
P11	Samvay	III	**Conceptualization** Mention five real life examples of Nitya and anitya sambandha.
P12	Abhav	III	**Application**: Write five real life experiences of pragabhava, pradhwamsabhava, atyantabhava and anyonyabhav.
P13	Upman Praman	III	**Illustration** : Upamana in practical life or with your prior learning. (Examples of upamana from Ashtang Hridaya and Charak samhita)and prior learning (Examples in Physics, chemistry etc)
P14	Yukti Praman	III	**Conceptualization:** How various factors influence the process of the decision making? **Application** : Write 5 examples of Yukti in practical life or with your prior learning. **ECE:** Role of Yukti in Sharir, Nidan, Chikitsa and Anusandhan.
P15	Satkaryavad and other vadas	III	**Justification** : Parinama vada: Describe 3 real life or with your prior learning examples (Physics, Chemistry etc). Justification of Satkarya vada.: Describe 3 real life or with your prior learning examples. Swabhavoparama vada : Describe 3 real life or with your prior learning examples. Pakajotpatti siddhanta.: Write 3 examples of real life or with your prior learning. Justification of Arambhavada Describe 3 real life or with your prior learning examples
P16	Cause and effect theory	III	**Illustration:** Karya Karan Bhav: Write Samavayi, asamavayi and Nimitta Karana of a karya in real life examples (5 examples). Examples learned in Physics, Chemistry, Biology. **Search** Find out use of cause effect theory in other sciences. **Schematic representation** of cause effect in any examples.

			Application: Assess the 10 factors of Charakokta Karyakarana bhava regarding any task consider the task as karya Remember and write theories of evolution you learned within and other than syllabus.
A1	**Other Activities in Journal.**	**I,** **II,** **III.**	1. **Oral presentation:** on allotted topic, PPT slides be made and Copy of slides be pasted in activity book 2. **Quiz:** Participation of all students in Quiz on some topic of Padartha vijnana. 3. **Recitation:** Important shloka of padartha vijnana recitation everyday or alternate days by students and written in diary. 4. Each student will do Pick and speak on topics of Padartha Vijnana. 5. e charts / animations etc.

Table 4: Learning objectives (Practical) of AyUG-PV

Practical									
A4 Course outcome	**B4 Learning Objective (At the end of the session, the Students should be able to)**	**C4 Domain/ sub**	**D4 Must to know/ desirable to know/ Nice to know**	**E4 Level Does/ Shows how/ Knows how/ Know**	**F4 T-L method**	**G4 Assessment**	**H4 Formative /summative**	**I4 Term**	**J4 Integration**
	Practical1-Ayurved Nirupan Time (practical- 2 hours)								
CO1	Define Ayurved	Cognitive Recall	MK	knows	discussion	Viva	**F & S**	**I**	
CO1	Conduct the survey to identify the perception about Ayurved in the society	Psychomotor	MK	Shows	Demonstration/ discussion	Viva	**F&S**	**I**	
	Practical2-Darshan and Padarth (Practical- 1hour)								
CO2	Discuss and compare the meanings of philosophy, darshana, spirituality, religion.	Cognitive / Recall	MK	Knows how	Demonstration/ discussion/ brainstorming	Viva	F &S	I	
CO2	Find and write names of different philosophies?	Cognitive/Recall	MK	Knows how	Demonstration/ discussion/ brainstorming	Viva	F&S	I	
Practical - 3(hitayu/Sukhayu) Time (Practical/ Clinical 2 hours) **:**									

CO 1	Discuss characters of hitayu, &Sukhayu	Cognitive /Recall	MK	Knows how	Demonstration/ discussion/ brainstorming	Viva	F&S	I	
CO 1	Identifies characters of hitayu, &Sukhayu in healthy individuals	Cognitive / Comprehension	MK	Knows How	Demo/Practical	Viva	F& S	I	
Practical 4- Dravya **Time** (Practical/ Clinical 6 hours)									
CO1,3	Define dravya, discuss nature of dravya	Cognitive Recall	MK	Knows how	Demonstration/ discussion/ brainstorming	Viva	F&S	I	
CO1,3	Identify pentaelemental nature of Ahar Dravya Aushadh Dravya in given examples	Cognitive/ Comprehension	MK	Shows	Practical/Demonstration	Viva/ Practicals	F& S	I	
CO1,3	Identify the Guna and Karma in the given dravya	Cognitive/ Comprehension	MK	Knows how	Practical/Demonstration	Viva/ Practicals	F&S	I	
CO1,3	Categorize the Aushadhi dravya by dominance of Mahabhoot e.g. Parthiv /Jaleeya/ Agney/ Vayaveey/ Akasheey dravya with reasons	Cognitive/ Comprehension	MK	Knows how	Practical/Demonstration	Viva/ Practicals	F&S	I	
CO1,3	Identify the directions in and enlist the content in each direction in your campus.	Cognitive/ Comprehension	MK	Knows how	Practical/Demonstration	Viva/ Practicals	F&S	I	
CO1,3	Discus the concept of Kala as per Ayurved and	Cognitive/ Recall	MK	Knows	Demonstration/ discussion/	Viva	F&S	I	

	contemporary sciences.				brainstorming				
CO1,3	find the diseases common for different age groups (balyavastha/ tarunyavastha/ vruddhavastha)	Cognitive/ Comprehension	MK	Knows how	Early Clinical Exposure.	Viva/ Practicals	F&S	I	
Practical - 5(Guna) Time (Practical/ Clinical 5 hours)									
CO 3	Discuss Guna,	Cognitive/ Recall	MK	Knows how	Demonstration/ discussion/ brainstorming	Viva	F&S	II	
CO 3	Identify Gunas in given Ahar dravya.	Cognitive/ Comprehension	MK	Knows How	Demo/Practical	Viva/ Practicals	F&S	II	
CO 3	Identify Gunas in given Sharir dravya.	Cognitive/ Comprehension	MK	Knows how	Practical/Demonstration	Viva/ Practicals	F&S	II	
CO 3	Identify the specification of Shabda, Sparsha, Rupa, Rasa, Gandha in Dravy	Cognitive/ Comprehension	MK	Knows how	Demonstration of Dravyas like- kutki, gojihva, guduchi, yashtimadhu, sariva etc.	Viva/ Practicals	F&S	II	
CO 3	find the different therapies based on 5 Sartha Gunas. e.g.Gandha. Shabda, Sparsha.	Cognitive/ Comprehension	DK	knows	Demonstration/ discussion/ brainstorming	Viva/ Practicals	F&S	II	

CO 3	Observe and record the effects of Seasons on Gurvadi gunas in body and nature	Cognitive/ analysis	MK	Knows how	Practical/Demonstration	Viva/ Practicals	F&S	II	
CO 3	Correlate Gurvadi gunas with concepts learned in Physics, Chemistry and Biology.	Cognitive/ comprehension	MK	Knows how	Demonstration/ discussion/ brainstorming	Viva/ Practicals	F&S	II	
CO 3	Identify the paratva-aparatva in five examples	Cognitive/ Comprehension	MK	Knows how	Practical/Demonstration	Viva/ Practicals	F&S	II	
CO 3	Perform the Sanskar (toyasannikarsha/vasan/ Bhavana)	Psychomotor	MK	Shows	Practical/Demonstration	Viva/ Practicals	F&S	II	
CO 3	Frame the real life situations related to Atma Guna(sukha, dukkha etc)	Cognitive/ Comprehension	MK	Knows how	Demonstration/ discussion/ brainstorming	Viva/ Practicals	F&S	II	
Practical -6 Karma Time (Practical/ Clinical 3 hours)									
CO 3	Discuss Karma	Cognitive/ Recall	MK	**Knows how**	Demonstration/ discussion/ brainstorming	Viva	F&S	II	
CO 3	Classify Karma in given	Cognitive/ Comprehe	MK	Knows how	Demonstration/ Practical	Viva/ Practicals	F&S	II	

	examples (panchakarma/Shastrakarma)	nsion							
CO 3	Illustrate five types of Karma in collage of pictures/ photos	Cognitive/ Comprehe nsion	MK	Knows how	Practical/Demon stration	Viva/ Practicals	F&S	II	
CO 3	compare Karma with concepts learned in Physics, Chemistry etc.	Cognitive/ Comprehen sion	MK	Knows	Practical/Demon stration	Viva/ Practicals	F&S	II	
Practical – 7 Pratyaksha Praman Time (Practical/ Clinical 5 hours)									
CO4	Discuss Pratyaksha Praman	Cognitive/ Recall	MK	**Knows how**	Demonstration/ discussion/ brainstorming	Viva	F&S	II	
CO4	Find identification marks for identification of herbs/ minerals which need Pratyaksha.	Cognitive/ Comprehe nsion	MK	Knows how	Demonstration/ Practical	Viva/ Practicals	F&S	II	
CO4	Note down the factors from Prakruti analysis which need pratyaksh (like- colour, dry skin)	Cognitive/ Comprehe nsion	MK	Knows how	Practical/Demon stration	Viva/ Practicals	F&S	II	
CO4	Discuss the use of pratyaksha in examination of patient and Diagnosis of disease.	Cognitive/ Comprehe nsion	MK	Knows how	ECE/ discussion	Viva/ Practicals	F&S	II	
CO4	identifies with examples of Shabda,(snigdha/ ruksha etc) Sparsha (snigdha/ ruksha etc),	Cognitive/ Comprehe nsion	MK	Knows how	Practical/Demon stration/ Shabd from recordings, (snigdha/	Viva/ Practicals	F&S	II	

	Rupa, Rasa(taste threshold video), Gandha.				ruksha etc) Sparsha by touching or instruments. (snigdha/ ruksha etc), Rupa, Rasa(taste threshold video), Gandha.(intensity of Smell)				
CO4	Identifies the gunas which can be perceived by one sense (ekendriya) organ and more than one sense organ (Dwiendriya etc).	Cognitive/ Comprehension	MK	Knows how	Demonstration/ discussion/ brainstorming	Viva/ Practicals	F&S	II	
Practical -8 Pratyaksha Badhakar Bhav Time (Practical/ Clinical 2 hours)									
CO4	Discuss Pratyaksha Badhakar Bhav (limitations of pratyaksha.)	Cognitive/recall	MK	Knows	Lecture	Viva	F&S	II	
CO4	Identify and classifies Pratyaksha badhakar Bhav in given examples.	Cognitive/ Comprehension	MK	Knows how	Demonstration/ Practical. Ask examples or encourage to identify examples.	Viva/ Practicals	F&S	II	

CO4	Justify the use of various equipment in examination of patient and Diagnosis of disease.	Cognitive/ Comprehension	MK	Knows how	Demonstration/ discussion/ brainstorming/ Video Clips	Viva/ Practicals	F&S	II	
Practical -9 Anuman praman Time (Practical/ Clinical 5 hours)									
CO4	Discuss Anuman praman	Cognitive/ Recall	MK	Knows	Demonstration/ discussion/ brainstorming	Viva	F&S	II	
CO4	Identify and classify Anuman praman with type in given examples.	Cognitive/ Comprehension	MK	knows	Demonstration/ Practical, Ask examples or encourage to identify examples.	Practical/Demonstration	F&S	II	
CO4	Find and discuss examples of Vyapti (associations)in real life.	Cognitive/ Comprehension	MK	Knows how	Practical/Demonstration. Ask examples or encourage to identify examples.	Practical/Demonstration	F&S	II	
CO4	Apply panchavayava vakya for drawing inference in practicals conducted	Cognitive/ Comprehension	MK	Knows how	Practical/Demonstration	Practical/Demonstration	F&S	II	
CO4	Identify and discuss Hetvabhas in given examples	Cognitive/ Comprehension	MK	Knows how	Practical/Demonstration. Ask examples or encourage to identify	Practical/Demonstration	F&S	II	

					examples.				
CO4	Draw inference in various sciences on the basis of Vyapti.	Cognitive/ recall	MK	**knows**	Demonstration/ discussion/ brainstorming	Practical/Demonstration	F&S	II	
Practical -10 Samanya Vishesh Siddhant Time (Practical/ Clinical 5 hours)									
CO 3	Discuss Samanya vishesh Siddhant	Cognitive/ Rcall	MK	**Knows**	Demonstration/ discussion/ brainstorming	Viva	F&S	III	
CO 3	Identify and classifies Samanya vishesh Siddhant with type in given examples.	Cognitive/ Comprehension	MK	**Knows how**	Demonstration/ Practical/ Ask examples or encourage to identify examples.	Viva/ Practical	F&S	III	
CO 3	Identify samanyatva and visheshatva among plants in Vanaushadhi udyan	Cognitive/ Comprehension	MK	Knows how	Practical/Demonstration.	Viva/ Practicals	F&S	III	
CO 3	Make a chart/ eChart of food articles and activities to illustrate the relationship of samanya/vishesha with dosha-dhatu-malas.	Cognitive/ Comprehension	MK	Knows how	Practical/Demonstration	Presentation/ Viva/ Practicals	F&S	III	
CO 3	Make a poster seasonal vegetables and fruits which are Samanya/Vishesha with the dosha.	Cognitive/ Comprehension	MK	Knows how	Practical	Presentation /Viva/ Practicals	F&S	III	
Practical -11 Samavay Time (Practical/ Clinical 1 hour)									

CO 3	Discuss Samavay	Cognitive/ Recall	MK	**Knows**	Demonstration/ discussion/ brainstorming	Viva	F&S	III	
CO 3	Mention five real life examples of Nitya and anitya sambandha.	Cognitive/ Comprehe nsion	MK	**Knows how**	Demonstration/ Practical/ Ask examples or encourage to identify examples.	Viva/ Practical	F&S	III	
Practical -12 Abhav Time (Practical/ Clinical 1)									
CO 3	Discuss Abhav	Cognitive/ Recall	MK	**Knows how**	Demonstration/ discussion/ brainstorming	Viva	F&S	III	
CO 3	Write real life experiences of pragabhava, pradhwamsabhava, atyantabhava and anyonyabhav.	Cognitive/ Comprehe nsion	MK	**Shows**	Demonstration/ Practical/ Ask examples or encourage to identify examples.	Viva	F&S	III	
Practical - 13 Upman Praman **Time** (Practical/ (Practical/ Clinical 1 hour)									
CO4	Discuss Upaman Praman	Cognitive/ Recall	MK	**Knows how**	Demonstration/ discussion/ brainstorming	Viva/ Practical	F&S	III	
CO4	Illustrate Upamana in practical examples and real life situation.	Cognitive/ Comprehe nsion	MK	Knows how	Demonstration/ Practical/ Ask examples or encourage to identify examples.	Viva/ Practicals	F&S	III	
CO4	Identify Examples of upamana from Ashtang	Cognitive/ Comprehe	MK	Knows how	Demonstration/ discussion/	Viva/ Practicals	F&S	III	

	Hridaya and Charak Samhita	nsion			brainstorming.				
CO4	Identify examples in Physics, chemistry biology where Upaman is used	Cognitive/ Comprehen sion	MK	Knows how	Demonstration/ discussion/ brainstorming/ Ask examples or encourage to identify examples.	Viva/ Practicals	F&S	III	
Practical -14 Yukti Praman Time (Practical/ Clinical 1 hour									
CO4	Discuss Yukti Praman	Cognitive/ Recall	MK	**Knows**	Demonstration/ discussion/ brainstorming	Viva	F&S	III	
CO4	Illustrate examples of Yukti in practical life or with your prior learning.	Cognitive/ Comprehe nsion	MK	Knows how	Demonstration/ Practical/ Ask exapmles or encourage to identify examples.	Viva/ Practicals Quiz	F&S	III	
CO4	Identify Role of Yukti in Nidan, Chikitsa and Anusandhan (research).	Cognitive/ Comprehe nsion	MK	Knows how	ECE/ Demonstration/	Viva/ Practicals/ PBL	F&S	III	
Practical -15 Various Vadas Time (Practical/ Clinical 3 hour)									
CO5 CO2	Discuss Satkaryavad	Cognitive/ Recall	MK	**Knows how**	Demonstration/ discussion/ brainstorming	Viva	F&S	III	
CO5 CO2	Justify Satkaryavad through real life	Cognitive/ comprehens ion	MK	Knows how	Demonstration/ Practical/ /Ask examples or	Viva/ Practicals/ PBL	F&S	III	

	examples/ examples from prior learning				encourage to identify examples.				
CO5 CO2	Justify Parinamvad through real life examples/ examples from prior learning	Cognitive/ comprehension	MK	Knows how	Practical/Demonstration/ /Ask examples or encourage to identify examples.	Viva/ Practicals	F&S	III	
CO5 CO2	Justify Pakajotpatti through real life examples/ examples from prior learning	Cognitive/ comprehension	MK	Knows how	Practical/Demonstration/ /Ask examples or encourage to identify examples.	Viva/ Practicals	F&S	III	
CO5 CO2	Justify Swabhavoparamvad through real life examples/ examples from prior learning	Cognitive/ comprehension	MK	**Knows how**	Demonstration/ discussion/ brainstorming/ /Ask examples or encourage to identify examples.	Viva/ Practicals	F&S	III	
CO5 CO2	Justify Arambhvad through real life examples/ examples from prior learning	Cognitive/ comprehension	MK	Knows how	Demonstration/ Practical//Ask examples or encourage to identify examples.	Viva/ Practicals	F&S	III	
Practical -16 Cause and Effect theory Time (Practical/ Clinical 2 hours)									
CO5, CO2	Discuss Cause and effect theory	Cognitive/ comprehend	MK	**Knows**	Demonstration/ discussion/ brainstorming	Viva/ Quiz	F&S	III	
CO5 CO2	Identify Samavayi, Asamavayi and Nimitta	Cognitive/ Comprehe	MK	Knows How	Demonstration/ Practical/Ask	Viva/ Practicals	F&S	III	

	karan of a Karya in real life examples/ examples withprior learning	nsion			examples or encourage to identify examples.				
CO5	Find out use of cause effect theory in other sciences.	Cognitive/ comprehens ion	MK	Knows how	Practical/Demon stration	Viva/ Practicals/ Debate	F&S	III	
CO5	Represent cause and effect schematically in any examples	Cognitive/ comprehens ion	MK	Knows how	Practical/Demon stration	Viva/ Practicals	F&S	III	
CO5	Assess the 10 factors of Charakokta Karyakarana bhava regarding any task consider the task as karya	Cognitive/ analysis	MK	Knows how	Practical/Demon stration	Viva/ Practicals	F&S	III	
CO5	Write theories of evolution you learned within and other than syllabus.	Cognitive/ comprehens ion	MK	Knows how	Practical/Demon stration	Viva/ Practicals	F&S	III	

Table 5: Non Lecture Activities Course AyUG-PV

Table 5- Course AyUG-PV Non Lecture Activities- 140

	List non lecture Teaching-Learning methods *	No of Activities
1	GROUP DISCUSSION	20
2	**PRACTICALS AND DEMONSTRATIONS**	45
3	ACTIVITY BASED LEARNING	10
4	PROBLEM BASED LEARNING	10
5	ENQUIRY BASED LEARNING	8
6	CASE BASED LEARNING	6
7	GAME BASED LEARNING	8
8	FLIPPED CLASSROOMS	6
9	DEBATE	8
10	SEMINARS	6
11	TUTORIALS	5
12	ROLE PLAY	5
13	SELF DIRECTED LEARNING	3
		140

Table 6: Assessment Summary AyUG-PV

6 A - Number of Papers and Marks Distribution

S.No.	Subject Code	Papers	Theory	Practical/Clinical Assessment					Grand Total
				Practical/ Clinical	Viva	Electives	IA	Sub Total	
1.	**AyUG-PV**	2	200	100	60	10 (Set-FB)	30	200	400

6 B - Scheme of Assessment (formative and Summative)

SR.NO.	PROFESSIONAL COURSE	DURATION OF PROFESSIONAL COURSE		
		First Term (1-6 Months)	Second Term (7-12 Months)	Third Term (13-18 Months)
1	First	3 PA & First TT	3 PA & Second TT	3 PA & UE

PA: Periodical Assessment; TT: Term Test; UE: University Examinations

6 C - Calculation Method for Internal assessment Marks (30 Marks)

TERM	PERIODICAL ASSESSMENT*					TERM TEST**	TERM ASSESSMENT	
	A	B	C	D	E	F	G	H
	1 (15 Marks)	2 (15 Marks)	3 (15 Marks)	Average (A+B+C/3)	Converted to 30 Marks (D/15)*30)	Term Test (Marks converted to 30)	Sub Total _/60 Marks	Term Assessment (…./30)
FIRST							E+F	(E+F)/2
SECOND							E+F	(E+F)/2
THIRD						NIL		E
Final IA	Average of Three Term Assessment Marks as Shown in 'H' Column.							
	Maximum Marks in Parentheses *Select an Evaluation Method which is appropriate for the objectives of Topics from the Table 6 D for Periodic assessment. Conduct 15 marks assessment and enter marks in A, B, and C. ** Conduct Theory (100 Marks)(MCQ(20*1 Marks), SAQ(8*5), LAQ(4*10)) and Practical (100 Marks) Then convert to 30 marks.							

6 D -Evaluation Methods for Periodical Assessment

S. No.	Evaluation Methods
1.	**Activities Indicated in Table 3 - Column G3 as per Indicated I, II or III term in column I3.**
2.	Practical / Clinical Performance
3.	Viva Voce, MCQs, MEQ (Modified Essay Questions/Structured Questions)
4.	Open Book Test (Problem Based)
5.	Summary Writing (Research Papers/ Samhitas)
6.	Class Presentations; Work Book Maintenance
7.	Problem Based Assignment
8.	Objective Structured Clinical Examination (OSCE), Objective Structured Practical Examination (OPSE), Mini Clinical Evaluation Exercise (Mini-CEX), Direct Observation of Procedures (DOP), Case Based Discussion (CBD)
9.	Extra-curricular Activities, (Social Work, Public Awareness, Surveillance Activities, Sports or Other Activities which may be decided by the department).
10.	Small Project
11.	**AyUG-PV Specific** Test on Topics in list of practicals.

6 E- Paper Layout

I PROFESSIONAL BAMS EXAMINATIONS

AyUG-PV

Paper-I

Time: 3 Hours Maximum Marks: 100

INSTRUCTIONS: All questions compulsory

TOTAL MARKS 100

		Number of Questions	Marks per question	Total Marks
Q 1	Multiple Choice Questions (MCQ)	20	1	20
Q 2	Short answer questions (SAQ)	8	5	40
Q 3	Long answer questions (LAQ)	4	10	40
				100

I PROFESSIONAL BAMS EXAMINATIONS

AyUG PV

Paper-II

Time: 3 Hours Maximum Marks: 100

INSTRUCTIONS: All questions compulsory

TOTAL MARKS 100

		Number of Questions	Marks per question	Total Marks
Q 1	Multiple Choice Questions (MCQ)	20	1	20
Q 2	Short answer questions (SAQ)	8	5	40
Q 3	Long answer questions (LAQ)	4	10	40
				100

6 F- Disribution of Theory Exam

	Paper I			D Type of Questions "Yes" can be asked. "No" should not be asked.		
	A **List of topics**	**B** **Term**	**C** **Marks**	**MCQ** **(1 mark)**	**SAQ** **(5 marks)**	**LAQ** **(10 marks)**
1	**Ayurveda nirupana**	I	25	Yes	Yes	Yes
2	**Padartha and darshana nirupana**	I		Yes	Yes	Yes
3.	**Dravya vijnaneeyam**	II	48	Yes	Yes	Yes
4.	**Guna vijnaneeyam**	II		Yes	Yes	Yes
5.	**Karma vijnaneeyam**	II		Yes	Yes	Yes
6.	**Samanya vijnaneeyam**	III	27	Yes	Yes	Yes
7.	**Vishesha vijnaneeyam**	III		Yes	Yes	Yes
8.	**Samavaya vijnaneeyam**	III		Yes	Yes	No
9	**Abhava vijnaneeyam**	III		Yes	Yes	No

	Paper II			D Type of Questions "Yes" can be asked. "No" should not be asked.		
	A **List of Topics**	**B** **Term**	**C** **Marks**	**MCQ** **(1 Mark)**	**SAQ** **(5 Marks)**	**LAQ** **(10 Marks)**
1	**Pariksha**	I	**26**	YES	YES	YES
2	**Aptopdesha Pariksha/Pramana**	I		YES	YES	YES
3.	**Pratyaksha Pariksha/Pramana**	II	**42**	YES	YES	YES
4.	**Anumanapariksha/Pramana**	II		YES	YES	YES
5.	**Yuktipariksha/Pramana**	III	**32**	YES	YES	NO
6.	**UpamanaPramana**	III		YES	YES	NO
7.	**Karya- Karana Siddhanta**	III		YES	YES	YES

6 G- Question paper blue print

Paper I –

A Question Sr. No	B Type of Question	C Question Paper Format
.Q1	**Multiple choice Questions (MCQ)** 20 Questions 1 mark each All compulsory (Must Know 15 MCQ Desirable to know 3 MCQ Nice to know 2 MCQ)	1. Topic number 1 2. Topic number 2 3. Topic number 3 4. Topic number 4 5. Topic number 5 6. Topic number 6 7. Topic number 7 8. Topic number 8 9. Topic number 9 10. Topic number 2 11. Topic number 3 12. Topic number 4 13. Topic number 5 14. Topic number 6 15. Topic number 7 16. Topic number 9 17. Topic number 1 18. Topic number 2 19. Topic number 3 20. Topic number 4
Q2	**Short answer Questions (SAQ)** Eight Questions 5 Marks Each All compulsory (Must know 7 . Desirable to know 1 No Questions on Nice to know.)	1. Topic no.1 2. Topic no.2 3. Topic no.3 4. Topic no.4 5. Topic no.5 6. Topic no.6/ Topic no.7 7. Topic no.8/ Topic no.9 8. Topic no.3/ Topic no.4
Q3	**Long answer Questions (LAQ)** Four Questions 10 marks each All compulsory (All questions on Must to know. No Questions on Nice to know and Desirable to know.)	1. Topic no.1/ Topic no.2 2. Topic no.3 3. Topic no.4/Topic no.5 4. Topic no.6/ Topic no.7

Paper II

A Question Sr. No	B Type of Question	C Question Paper Format
Q1	**Multiple choice Questions (MCQ)** 20 Questions 1 mark each All compulsory (Must know 15 MCQ Desirable to know 3 MCQ Nice to know 2 MCQ)	1. Topic number 1 2. Topic number 2 3. Topic number 3 4. Topic number 4 5. Topic number 5 6. Topic number 6 7. Topic number 7 8. Topic number 1 9. Topic number 2 10. Topic number 3 11. Topic number 4 12. Topic number 5 13. Topic number 6 14. Topic number 7 15. Topic number 1 16. Topic number 2 17. Topic number 3 18. Topic number 4 19. Topic number 7 20. Topic number 4
Q2	**Short answer Questions (SAQ)** Eight Questions 5 Marks Each All compulsory **(**Must know 7 . Desirable to know 1 No Questions on Nice to know.**)**	1. Topic no.1 2. Topic no.2 3. Topic no.3 4. Topic no.4 5. Topic no.5 6. Topic no.6 7. Topic no.7 8. Topic no.3/ Topic no.4
Q3	**Long answer Questions (LAQ)** Four Questions 10 marks each All compulsory (All questions on must know No Questions on Nice to know and Desirable to know)	1. Topic no.1/ Topic no.2 2. Topic no.3 3. Topic no.4 4. Topic no.7

6 H Distribution of Practical Exam

Practical – (Practical 100 +Viva 60+Elective 10+ IA 30) =(Total 200 Marks)

SN	Heads	Marks
1	Practical (Total Marks 100)	**100**
a.	Spotting (4 Spots) Problem based on Principles in PV. Topics 1. Pratyaksha praman/Pratyaksha Badhakar Bhav 2. Vada (Any one) 3. Abhav/Samavay 4. Upaman/Yukti	20
b.	Journal of Activity book/ Projects. (Viva on journal and communication skill)	20
c.	Practical I (10 Marks Each) 1. Identify panchamahabhoot dominance in the given dravya 2. Identify Samanya- Vishesh in the given dravyas 3. Identify the Gunas in the given dravyas (Use different dravys for different students.)	30
d.	Practical II (Problem based questiones/ Situations)(10 Marks Each)(Any three) 1. Identify and explain the Karya Karan with types in given problem 2. Frame and Write Panchavayav vakya for the given anuman. 3. Identify Vyapti, Paksh, Sadhya, Hetu, Pakshadharmata, Sapaksha, Vipaksha in the give example. 4. Identify and explain Hetvabhas in given example. 5. Identify the vada applicable in given example.(any one vada.) 6. Identify Upama, Sajna- sajni sambhandha in given example.	30
2	Viva Voce	**60**
	Recitation of Shloka: 10 marks (sutras in Tarka sangraha, Samhitas, other)	
	Questions on Darshan 10 marks	
	Question on Dravya/ Guna/ Karma. 10 marks	
	Question on Samany/vishesh/samavaya/ Abhav 10 Marks	
	Question on one Praman 10 Marks	

	Question on Karya karan bhav 10 Marks.	
3	Internal Assessment	**30**
4	Electives	**10**
		200

7. References /Resourses

Reference Books

PadarthaVignana books		**Authorus**
1.	Padarthavigyan	Acharya Ramraksha Pathak
2.	AyurvediyaPadarthaVigyana	Vaidya Ranjit Rai Desai
3.	Ayurved Darshana	Acharya Rajkumar Jain
4.	PadarthaVigyana	Kashikar
5.	PadarthaVigyana	Balwant Shastri
6.	SankhyatantwaKaumadi	GajananShastri
7.	Psycho Pathology in Indian Medicine	Dr. S.P. Gupta
8.	CharakEvumSushrutkeDarshanik Vishay	Prof.Jyotirmitra Acharya
9.	AyurvediyaPadarthaVigyana	Dr. Ayodhya Prasad Achal
10.	PadarthaVigyana	Dr. Vidyadhar Shukla
11.	Post graduate text book of Samhitha&Sidhanta	Dr P.P.Kirathamoorthy and Dr Anoop AK
12	Padartha Vigyana	Dr. Ravidutta Tripathi
13.	AyurvediyaPadarthaVigyana	Vaidya Ramkrishna Sharma Dhand
14.	AyurvediyaPadartha Vigyan Parichaya	Vaidya Banwarilal Gaur
15.	AyurvediyaPadartha Darshan	Pandit Shivhare
16.	Scientific Exposition of Ayurveda	Dr. Sudhir Kumar
17	Padarthavignana and Ayurveda itihasa	Dr C R Agnives
18	Essentials of padarthavignana	Dr Vinodkumar MV
19	Padarthavignanevam Ayurveda Itihas	Dr RamnihorTapsi Jaiswal
20.	AyurvediyaPadarthavignana	Dr C R Agnives
21	AyurvediyaMoulikaSiddhanta	Dr V J Thakkar

COURSE CURRICULUM FOR FIRST PROFESSIONAL BAMS

(PRESCRIBED BY NCISM)



KRIYA SHARIRA

(SUBJECT CODE- AyUG-KS)

HUMAN PHYSIOLOGY

(Applicable from 2021-22 batch onwards for 5 years or until further notification by NCISM, whichever is earlier)

ncism

प्राणाभिसरः प्राणायतनानाम्

BOARD OF AYURVEDA
NATIONAL COMMISSION FOR INDIAN SYSTEM OF MEDICINE
NEW DELHI-110058

SCAN ME

Kriya

NCISM

I professional Ayurvedacharya (BAMS)

Subject Code: AyUG KS

Kriya Sharir

Summary

AyUG KS **Total number of Teaching hours: 400**			
Lecture hours (LH) - Theory		**150 Hours**	**150 Hours (LH)**
Paper I	75 Hours		
Paper II	75 Hours		
Non-Lecture hours (NLH) – Theory		**50 Hours**	**250 Hours (NLH)**
Paper I	25 Hours		
Paper II	25 Hours		
Non-Lecture hours (NLH) - Practical		**200 Hours**	

AyUG KS **Examination (Papers & Mark Distribution)**				
Item	**Theory Component Marks**	**Practical Component Marks**		
		Practical	**Viva**	**IA**
Paper I	**100**	**100**	**70**	**30**
Paper II	**100**			
Sub-Total	**200**	**200**		
Total marks	**400**			

Preface

Kriya Sharir (Human Physiology) is an important subject of the BAMS program for the undergraduate students of Ayurveda. The term sharir means ‘in the sharir’ or ‘related to the sharir’ thus Sharir Kriya deals with the study of the human body concerning its physiological norms i.e., the functioning of the human body in its normal state. This subject refers to the physiology and biochemistry of contemporary medical science.

The swasthya of an individual is based on 3 pillars of the body i.e., dosha, dhatu & mala. Kriya Sharir subject mainly deals with these 3 pillars. The basic concepts, knowledge, and applicability of Tridosha (Vata, Pitta, Kapha), Sapta Dhatus (Rasa, Rakta, Mamsa, Meda, Asthi, Majja, Shukra), and Trimala (Mutra, Purish, Sweda) are very important in the critical understanding of the disease. Kriya Sharir also deals with Prakriti, Strotas, Kostha, Agni, Oja, Mana, Aahar (Basic principles of food), shatkriyakal, the system-wise study of contemporary science, senses function and dysfunction, etc. All these fundamental topics are essential for the proper understanding of etiopathogenesis, diagnosis of disease, and its management which will be covered in para-clinical and clinical subjects.

New curriculum of Kriya Sharir is designed considering cognitive, affective, and psychomotor domains. There are group discussions, workshops, field visits, and activities beyond the textbook during the practical hours like preparation of charts, models, seminar presentations by students. Kriya Sharir subject also deals with teaching-learning methods like role play, flipped the classroom, etc. Some assessment methods like OSPE, PBL, DOPS, CBD, skill assessment, etc are incorporated. The main aim of the curriculum is to highlight the basic knowledge and to give a new scientific approach to undergraduate students to develop their skills of Ayurveda and make them competent to apply in clinical practice and research.

Index

Course Code and Name of Course 5
AyUG KS 5
Kriya Sharir (Human Physiology) 5
Table 1- Course learning outcomes and matched PO. 5
Table 2 : Contents of Course AyUG KS 6
Paper I – AyUG-KS 6
Paper II – AyUG-KS 8
Table 3: Learning objectives (Theory) of Course AyUG-KS 11
PAPER I 11
PAPER II 36
List of Practicals 52
Table 4: Learning objectives (Practical) of AyUG- KS 53
Table 5: Non-Lecture Activities Course AyUG- KS 60
Table 6: Assessment Summary 62
6 A- Number of papers and Marks Distribution 62
6 B - Scheme of Assessment (formative and Summative) 62
6 C - Calculation Method for Internal assessment Marks (30 Marks) 62
6 D - Evaluation Methods for Periodical Assessment 63
6 E- Paper Layout 63
Paper-I 63
Paper-II 63
6 F- Disribution of Theory Exam 64
Paper I 64
Paper II 65
6 G- Question paper blue print 66
Paper I 66
Paper II 67
6 H Distribution of Practical Exam 68
7. References / Resourses 70

Course Code and Name of Course

	Course code	Name of Course
	AyUG KS	**Kriya Sharir (Human Physiology)**

AyUG KS Course

Table 1- Course learning outcomes and matched PO.

SR1 CO No	A1 Course learning Outcomes (CO) AyUG KS At the end of the course AyUG-KS, the student should be able to-	B1 Course learning Outcomes matched with program learning outcomes.
CO 1	Explain all basic principles & concepts of Kriya Sharir along with essentials of contemporary human physiology and biochemistry related to all organ systems.	PO1, PO2
CO 2	Demonstrate and communicate normal and abnormal variables pertaining to Kriya Sharir such as Sara, Agni, Koshtha, Srotas etc.	PO2, PO3
CO 3	Differentiate between Prakriti and Vikriti in the individuals after carrying out relevant clinical examinations.	PO1, PO2, PO3, PO5
CO 4	Carry out clinical examination and experiments using equipments with interpretation of their results	PO4
CO 5	Differentiate the strengths & limitations of Ayurved and contemporary sciences	PO2
CO 6	Present a short project work / research activity covering the role of Kriya Sharir in preventive and promotive healthcare.	PO5, PO6, PO7, PO8, PO9
CO 7	Show a sense of curiosity and questioning attitude towards the life processes and to display compassion and ethical behaviour	PO2, PO5, PO6, PO7, PO9
CO 8	Effectively communicate verbally and in writing preferably using Ayurvedic terminology along with contemporary terminology among peers, teachers and community	PO8, PO9

Table 2 : Contents of Course AyUG KS

Paper I – AyUG-KS					
Sr No	**A2 List of Topics AyUG-KS** **Paper I**	**B2 Term**	**C2 Marks**	**D2 Lecture hours**	**E2 Non-Lecture hours**
PART-A (Marks-60)					
1	**Sharir:** Definition and synonyms of term Kriya, Sharir & Shaarir. Description of Sharir Dosha and Manasa Dosha. Mutual relationship between Triguna-Tridosha & Panchmahabhuta.	**I**	08	2	1
2	**Basic principles of Ayurveda:** Dosha dhatu mala mulam hi shariram. Description of basics of Srotas	**I**		2	1
3.	**Tridosha:** General description of Tridosha. Inter relationship between Ritu-Dosha-Rasa- Guna. Biological rhythms of Tridosha on the basis of day-night-age-season and food intake. Role of Dosha in the formation of Prakriti of an individual and in maintaining of health. Prakrita and Vaikrita Dosha.	**I**		3	0
4.	**Vata Dosha:** Vyutpatti (derivation), Nirukti (etymology) of the term Vata, general locations, general properties and general functions of Vata, five types of Vata (Prana, Udana, Samana, Vyana, Apana) with their specific locations, specific properties, and specific functions.	**I**	26	6	2
5.	**Pitta Dosha:** Vyutpatti, Nirukti of the term Pitta, general locations, general properties and general functions of Pitta, five types of Pitta (Pachaka, Ranjaka, Alochaka, Bhrajaka, Sadhaka) with their specific locations, specific properties, and specific functions. Similarities and differences between Agni and Pitta.	**I**		5	1
6.	**Kapha Dosha:** Vyutpatti, Nirukti of the term Kapha, general locations, general properties and general functions of Kapha, five types of Kapha (Bodhaka, Avalambaka, Kledaka, Tarpaka, Śleshaka) with their specific locations, specific properties, and specific functions.	**II**		4	1
7.	**Dosha Vriddhi-Kshaya:** Etiological factors responsible for Dosha Vriddhi, Dosha Kshaya and their manifestations.	**II**		1	1
8.	**Kriyakala:** Concept of Kriyakala, applied physiology of diseases produced due the vitiation of vata, pitta and kapha.	**II**		1	1
9	**Prakriti:** **Deha- Prakriti:** Vyutpatti, Nirukti, various definitions and synonyms for the term "Prakriti". Intra-uterine and extra-uterine factors influencing Deha-Prakriti, classification and characteristic features of each kind of Deha-Prakriti. **Manasa- Prakriti:** Introduction and types of Manasa- Prakriti	**II**		7	3
10.	**Ahara**: Definition, classification and significance of Ahara,	**III**		3	1

	Ahara-vidhi-vidhana, Ashta Aharavidhi Viseshayatana, Ahara Parinamkar Bhava.				
11.	**Agni**: Definition and importance, synonyms, classification, location, properties and functions of Agni and functions of Jatharagni, Bhutagni, and Dhatvagni.	**III**	26	4	1
12.	**Aharapaka** (Process of digestion): Description of Annavaha Srotas and their Mula. Description of Avasthapaka (Madhura, Amla and Katu). Description of Nishthapaka (Vipaka) and its classification. Role of Grahani & Pittadhara Kala. Separation of Sara and Kitta. Absorption of Sara. Genesis of Vata-Pitta-Kapha during Aharapaka process. Definition of the term Koshtha. Classification of Koshtha and the characteristics of each type of Koshtha.	**III**		7	2
PART-B (Marks-40)					
1	**Physiology Homeostasis**: Definition and mechanisms of maintenance of homeostasis. Cell physiology. Membrane physiology. Transportation of various substances across cell membrane. Resting membrane potential and action potential. Acid-base balance, water and electrolyte balance. Study of basic components of food.	**I**	23	5	1
2	**Physiology of Respiratory system**: functional anatomy of respiratory system. Definition of ventilation, mechanism of respiration, exchange and transport of gases, neural and chemical control of respiration, artificial respiration, asphyxia, hypoxia. Introduction to Pulmonary Function Tests.	**II**		5	2
3	**Physiology of Gastrointestinal system**: Functional anatomy of gastro-intestinal tract, mechanism of secretion and composition of different digestive juices. Functions of salivary glands, stomach, liver, pancreas, small intestine and large intestine in the process of digestion and absorption. Movements of the gut (deglutition, peristalsis, defecation) and their control. Enteric nervous system. Digestion and metabolism of proteins, fats and carbohydrates. Vitamins & Minerals- sources, daily requirement, functions, manifestations of hypo and hypervitaminosis.	**II**		7	2
4	**Physiology of Nervous System**: General introduction to nervous system, neurons, mechanism of propagation of nerve impulse, physiology of CNS, PNS, ANS; physiology of sensory and motor nervous system, Functions of different parts of brain, intelligence, memory, learning and motivation. Physiology of sleep and dreams, EEG. Physiology of speech and articulation. Physiology of temperature regulation.	**III**	17	7	3
5	**Physiology of Endocrine glands**: General introduction to endocrine system, classification and characteristics of hormones, physiology of all endocrine glands, their functions and their effects.	**III**		6	2

Paper II – AyUG-KS					
	A2 **List of Topics** **Paper II**	**B2** **Term**	**C2** **Marks**	**D2** **Lecture hours**	**E2** **Non-Lecture hours**
PART-A (Marks-60)					
1	**Dhatu**: Etymology, derivation, definition, general introduction of term Dhatu, different theories related to Dhatuposhana (Dhatuposhana Nyaya)	**I**	18	2	1
2	**Rasa Dhatu**: Etymology, derivation, location, properties, functions and Praman of Rasa-dhatu. Physiology of Rasavaha Srotas, Formation of Rasa Dhatu from Aahara Rasa, circulation of Rasa (Rasa-Samvahana), role of Vyana Vayu and Samana Vayu in Rasa Samvahana. Description of functioning of Hridaya. Ashtavidha Sara, characteristics of Tvakasara Purusha, conceptual study of Aashraya-Aashrayi Bhaava and its relation to Rasa and Kapha. Manifestations of kshaya and Vriddhi of Rasa	**I**		4	1
3.	**Rakta Dhatu**: Etymology, derivation, synonyms, location, properties, functions and Praman of Rakta Dhatu. Panchabhautikatva of Rakta Dhatu, physiology of Raktavaha Srotas, formation of Raktadhatu, Ranjana of Rasa by Ranjaka Pitta, features of Shuddha Rakta, specific functions of Rakta, characteristics of Raktasara Purusha, manifestations of Kshaya and Vriddhi of Raktadhatu, mutual interdependence of Rakta and Pitta.	**I**		3	1
4.	**Mamsa Dhatu**: Etymology, derivation, synonyms, location, properties and functions of Mamsa Dhatu, physiology of Mamsavaha Srotas, formation of Mamsa Dhatu, characteristics of Mamsasara Purusha, manifestations of Kshaya and Vriddhi of Mamsa Dhatu, Concept of Peshi.	**I**		2	1
5.	**Meda Dhatu**: Etymology, derivation, location, properties, functions and Praman of Meda Dhatu, physiology of Medovaha Srotas, formation of Medo Dhatu, characteristics of Medasara Purusha and manifestations of Kshaya and Vriddhi of Meda.	**I**		3	1
6.	**Asthi Dhatu**: Etymology, derivation, synonyms, location, properties, functions of Asthi Dhatu. Number of Asthi. Physiology of Asthivaha Srotas and formation of Asthi Dhatu, characteristics of Asthisara Purusha, mutual interdependence of Vata and Asthi Dhatu, manifestations of Kshaya and Vriddhi of Asthi Dhatu.	**II**	19	2	1
7.	**Majja Dhatu** : Etymology, derivation, types, location, properties, functions and Praman of Majjaa Dhatu, physiology of Majjavaha Srotas, formation of Majja Dhatu, characteristics of Majja Sara Purusha, relation of Kapha, Pitta, Rakta and Majja, manifestations of Kshaya and Vriddhi of	**II**		3	1

	Majja Dhatu.				
8.	**Shukra Dhatu:** Etymology, derivation, location, properties, functions and Praman of Shukra Dhatu, physiology of Shukraravaha Srotas and formation of Shukra Dhatu. Features of Shuddha Shukra, characteristics of Shukra-Sara Purusha, manifestations of Kshaya and Vriddhi of Shukra Dhatu.	**II**		3	1
9	**Concept of Ashraya-Ashrayi bhava** i.e. inter-relationship among Dosha, Dhatu Mala and Srotas. Applied physiology of diseases asserting saptadhatu enlisted under dhatu pradoshaj vikar.	**II**		1	1
10.	**Ojas**: Etymological derivation, definition, formation, location, properties, Praman, classification and functions of Ojas. Description of Vyadhikshamatva. Bala Vriddhikara Bhava. Classification of Bala. Etiological factors and manifestations of Ojavisramsa, Vyapat and Kshaya.	**II**		3	1
11.	**Upadhatu**: General introduction, etymological derivation and definition of the term Upadhatu. Formation, nourishment, properties, location and functions of each Upadhatu. **Stanya**: Characteristic features and methods of assessing Shuddha and Dushita Stanya, manifestations of Vriddhi and Kshaya of Stanya. **Artava**: Characteristic features of Shuddha and Dushita Artava. Differences between Raja and Artava, physiology of Artavavaha Srotas. **Tvak**: classification, thickness of layer and functions.	**II**	23	6	1
12.	**Mala**: Etymological derivation and definition of the term Mala. Aharamala: Enumeration and description of the process of formation of Aharamala. **Purisha**: Etymological derivation, definition, formation, properties, quantity and functions of Purisha. Physiology of Purishavaha Srotas, manifestations of Vriddhi and Kshhaya of Purisha. **Mutra**: Etymological derivation, definition, formation, properties, quantity and functions of Mutra. Physiology of Mutravaha Srotas, physiology of urine formation in Ayurveda, manifestations of Vriddhi and Kshhaya of Mutra. **Sveda**: Etymological derivation, definition, formation and functions of Sveda. Manifestations of Vriddhi and Kshaya of Sveda. Discription of Svedvaha Srotas **Dhatumala**: Brief description of each type of Dhatumala.	**III**		6	2
13	**Indriya vidnyan**: Physiological description of Panchagyaanendriya and physiology of perception of Shabda, Sparsha, Rupa, Rasa and Gandha. Physiological description of Karmendriya.	**III**		1	1
14	**Manas**: Properties, functions and objects of Manas. Physiology of Manovaha Srotas.	**III**		2	1
15	**Atma**: Properties of Atma. difference between Paramatma and Jivatma; Characteristic features of existence of Atma in living body.	**III**		2	0
16	**Nidra & Swapna**: Nidrotpatti, types of Nidra, physiological and clinical significance of Nidra; Svapnotpatti and types of Svapna.	**III**		2	0

PART-B (Marks-40)					
1	**Haemopoetic system**: composition, functions of blood and blood cells, Haemopoiesis (stages and development of RBCs, and WBCs and platelets), composition and functions of bone marrow, structure, types and functions of haemoglobin, mechanism of blood clotting, anticoagulants, physiological basis of blood groups, plasma proteins, introduction to anaemia and jaundice.	**I**	18	5	2
2	**Immunity**: classification of immunity: Innate, acquired and artificial. Different mechanisms involved in immunity: Humoral (B-cell mediated) and T-Cell mediated immunity. Hypersensitivity.	**I**		2	0
3	**Physiology of cardio-vascular system**: Functional anatomy of cardiovascular system. Cardiac cycle. Heart sounds. Regulation of cardiac output and venous return. Physiological basis of ECG. Heart-rate and its regulation. Arterial pulse. Systemic arterial blood pressure and its control.	**I**		5	2
4	**Muscle physiology**: comparison of physiology of skeletal muscles, cardiac muscles and smooth muscles. Physiology of muscle contraction.	**II**	07	2	0
5	**Adipose tissue**: lipoproteins like VLDL, LDL and HDL triglycerides. Functions of skin, sweat glands and sebaceous glands.	**II**		2	1
6	**Physiology of male and female reproductive** systems: Description of ovulation, spermatogenesis, oogenesis, menstrual cycle.	**II**	15	5	2
7	**Physiology of Excretion**: functional anatomy of urinary tract, functions of kidney. Mechanism of formation of urine, control of micturition. Formation of faeces and mechanism of defecation.	**III**		4	2
8	**Special Senses, Sleep and Dreams**: Physiology of special senses. physiology of sleep and dreams	**III**		5	1

Table 3: Learning objectives (Theory) of Course AyUG-KS

PAPER I									
A3 Course outcome	**B3 Learning Objective (At the end of the session, the Students should be able to)**	**C3 Domain/sub**	**D3 Must to know/ desirable to know/Nice to know**	**E3 Level Does/ Shows how/ Knows how/ Know**	**F3 T-L method**	**G3 Assessment**	**H3 Formative /summative**	**I3 Term**	**J3 Integration**
	Paper I (Part A) (60 Hours)								
	Topic 1 – *Sharir* (human body) (3 hr) [Lecture: 2 hours, non-lecture: 1 hour]								
CO 1	Explain the definition and synonyms of the term *kriya*, *sharira* and *shaarira*	Cognitive (recall, comprehension)	Mk	K	Lecture	Written/ (MCQ, MEQ, LAQ, SAQ) Viva voce	F & S	I	
CO 2	Enlist the *sharira dosha* and *manasa dosha* and	Cognitive (recall, comprehension)	Mk	K	Lecture Discussion	Written/ Viva voce	F & S	I	
CO 1	Explain mutual relationship between *trigun*a, *panchmahabhuta* and *tridosha*	Cognitive (comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	
	Topic 2 – Basic Principles of *Kriya Sharir* (3 hr) [Lecture: 2 hours, non-lecture: 1 hour]								
CO 1	Express critical view of why *dosha- dhatu-mala* are described in specific numbers.	Cognitive (recall)	Dk	Kh	Discussion	Written	F	I	
CO 1	Explain the principle of "*dosha-dhatu-mala mulam hi shariram".*	Cognitive (recall)	Mk	Kh	Lecture Discussion	Written	F & S	I	
CO 1	Discuss term homeostasis in *dosha-*	Cognitive (comprehension)	Dk	Kh	Discussion	Viva voce	F	I	

	dhatu-mala.								
CO 1	Explain role of *srotas* in the body.	Cognitive (comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	
CO 1	Explain the basic concept of *srotas* and classify different *srotas* based on Rachana (morphological), *kriya* (functions) and *guna* (properties)	Cognitive (comprehension)	Mk	Kh	Lecture Discussion Flipped classroom	Written/ Viva voce	F & S	I	*Rachana sharir*
CO 1	Describe the significance of the knowledge of *srotas* in *kriya sharira*	Cognitive (comprehension)	Mk	Kh	Discussion	Written/ Viva voce	F & S	I	
CO 1	Compare *mula sthana* of *srotas* described in *samhitas* in view of *kriya sharir* and contemporary medical science	Cognitive (application)	Dk	Kh	Model Discussion Tutorial Assignment	Viva voce	F & S	I	
CO 1	Find out similarities and differences between *srotas* and system of contemporary science.	Cognitive (application)	Nk	Kh	Discussion Self-learning Think-Pair-Share	Short notes	F	I	
CO 1	Document observations on correlation of anyone environmental global change and physiological variation as per Ayurved, contemporary sciences.	Cognitive (application)	Nk	Kh	Discussion Self-learning Think-Pair-Share	Short notes	F	I	
CO 1	Recognize the contribution of Ayurveda in the formation of four basic principles of Bioethics mentioned in contemporary science.	Cognitive (recall) (comprehension)	Nk	Kh	Lecture Discussion	Written	F	I	
	Topic 3 – *Tridosha* (Three humors of the body) (3 hr) [Lecture: 3 hours, non-lecture: 0 hours]								
CO 1	Describe *utpatti*	Cognitive	Mk	K	Lecture	Written/	F & S	I	

	(prasad & malabhuta), locations of *dosha*.	(recall)				Viva voce			
CO 1	State biological rhythms or circadian cycle of *tridosha* based on day-night-age-season food intake and relation to the environment	Cognitive (comprehension)	Mk	Kh	Lecture discussion Seminar	Written/ Viva voce	F & S	I	
CO 1	Explain the applied role of *dosha* in maintaining health and State of equilibrium and recognize the role of *dosha* in the formation of *prakriti* of an individual	Cognitive (comprehension)	Mk	Kh	Lecture discussion Seminar	Written/ Viva voce	F & S	I	
CO 1	State importance of *dosha* in lifestyle management and mutual relationship between *ritu-kala-dosha-rasa-guna*	Cognitive (application)	Nk	Kh	Discussion PBL	Viva voce	S	I	
CO 1	Interpret *gurvadi guna* of *dosha* in term of applied physiology and clinical aspect in different chapters of Charak.	Cognitive (application)	Nk	Kh	Discussion PBL/CBD	Written	F	I	*Padartha Vijnana. Kayachikitsa*
CO 1	Interpret *sama* & *niram* lakshana of dosha	Cognitive (comprehension)	Dk	Kh	Discussion	Written	F	I	
CO 1	Discuss the evidences of functional significance of *vata, pitta* and *kapha* in perspective of nervous, endocrine, immune or any other system.	Cognitive (application)	Nk	Kh	Discussion Think-Pair-Share	Self-assessment	SA	I	
CO 1	Discuss how to examine vruddhi-kshaya of dosha	Cognitive (comprehension)	Dk	Kh	Discussion PBL	Viva voce	S	I	
CO 1	State materialism and	Cognitive	Mk	Kh	Discussion	Viva voce	F	I	

	immaterialism of tridosha	(comprehension)							
	Topic 4 – *Vata dosha* (8 hr) [Lecture: 6 hours, non-lecture: 2 hours]								
CO 1	Define the *vyutpatti* and *nirukti* of *vata*.	Cognitive (Recall)	Mk	K	Lecture	Written/ Viva voce	F & S	I	
CO 1	Describe *guna* and general locations of *vata dosha*.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	
CO 1	Describe general properties & functions of *vata dosha* and demonstrate the normal *guan, karma of vata dosha* in a healthy person.	Cognitive (Comprehension)	Mk	Kh/Sh	Lecture Discussion	Written/ Viva voce	F & S	I	*Rognidan Vikriti Vidnyan*
CO 1	Enlist five types of *vata* and describe *prana, udana vata* with their specific locations, properties and functions.	Cognitive (Recall & Comprehension)	Mk	Kh	Lecture Confusion technique Demonstration Chart, Model	Written/ Viva voce Skill assessment	F & S	I	
CO 1	Explain the term *nishwas, ucchwas, shwasan* & describe the role of *prana vayu & udana vayu* in *shwasan prakriya*.	Cognitive (Comprehension)	Mk	Kh	Lecture	Written/ Viva voce	F & S	I	
CO 1	Describe *shwasan prakriya* according to *sharangadhar*.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion Model, Video	Written/ Viva voce	F & S	I	
CO 1	Describe clinical importance of classification of *swara* and *vyanjana* according to their *uccharana sthan*.	Cognitive (Application)	Nk	Sh	Demonstration Discussion Assignment PBL/CBL	Self-assessment	SA	I	Sanskrit
CO 1	Describe the formation and articulation of *shabda* (words) and explain the bio-physiology of	Cognitive (Comprehension)	Dk	Kh	Lecture A/V aids.	Written/ Viva voce	F & S	I	

	induction of *vaak* and role of *udaan vaayu* in it.								
CO 1	Explain role of pranayama, *puraka*, *rechaka* and *kumbhaka* in *samyaka shwasana*, *swara/ ghosha utpatti*	Cognitive (Analysis)	Nk	Sh	Demonstration Discussion Assignment PBL/CBL	Self-assessment	SA	I	*Swasthavrutta*
CO 1	Describe *samana* with their specific locations, properties and functions.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion Confusion technique Demonstration Chart, Model	Written/ Viva voce	F & S	I	
CO 1	Describe *vyana vata* with their specific locations, properties and functions.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion Confusion technique Demonstration Chart, Model	Written/ Viva voce	F & S	I	
CO 1	Describe role of *vyana vayu* & *samana vayu* in the process of *rasa-samvahanana*	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion Seminar	Written/ Viva voce	F & S	I	
CO 1	Review the contribution of *vyan and saman vayu* in the process of cardiac circulation.	Cognitive (Comprehension)	Dk	K	Discussion	Written/ Viva voce	F	I	
CO 1	Interprete microbiota, gut brain axis for understanding enteric nervous system in perspective of *vata, saman vayu.*	Cognitive (Comprehension)	Nk	K	Discussion	Self-assessment	SA	I	
CO 1	Describe *Apana vata* with their specific locations, properties and functions.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion Confusion technique Demonstration	Written/ Viva voce	F & S	I	

CO 1	Document & discuss your observations on correlation of functions of *apana vayu* with which type of nervous system & why?	Cognitive (Comprehension)	Nk	K	Discussion	Self-assessment	SA	I	
CO 1	Illustrate gati (directions) of types of vata by using lebel diagramme.	Cognitive (analysis)	Dk	Kh	Illustration	Self-assessment Peer evaluation.	SA	I	
CO3	Explain difference between *kshaya & vriddhi lakshana* of *vata Dosha*	Cognitive (Comprehension)	MK	Kh	Chalk-board Presentation Symposium Discussion	Written/ Viva voce	F & S	I	
CO5	Interpret which type of *vata dosha* gets vitiated and in which clinical condition the use of proper *aahar dravya* is prevalent as per *kshaya, vriddhi of vata dosha*.	Cognitive (Application)	Dk	Sh	Demonstration Discussion PBL	Written/ Viva voce	F & S	I	
CO 1	Recite and to explain the important verses of *vata dosha*. (ex-*sthana, karma, types, vriddhi and kshaya*)	Cognitive (Recall)	Dk	Sh	Discussion Recitation	Written/ Viva voce	F & S	I	Sanskrit Samhita
	Topic 5 – *Pitta dosha* (6 hr) [Lecture: 5 hours, non-lecture: 1 hour]								
CO 1	Define the *vyutpatti* and *nirukti* of *pitta*.	Cognitive (Recall)	Mk	Kh	Lecture	Written/ Viva voce	F & S	II	
CO 1	Describe *guna* and general locations of *pitta dosha*.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion Demonstration	Written/ Viva voce Skill assessment	F & S	II	
CO 1	Describe general	Cognitive (Recall	Mk	Kh	Lecture	Written/	F & S	II	*Rognidan*

	properties & functions of *pitta dosha* and explain the normal *guna, karma of pitta dosha* in a healthy person.	& Comprehension)			Discussion Seminar	Viva voce			*Vikriti Vidnyan*
CO 1	Enlist five types of *pitta dosha* and describe *pachaka* with their specific locations, properties and functions.	Cognitive Recall	Mk	Kh	Lecture Discussion Demonstration	Written/ Viva voce	F & S	II	
CO 1	Record your opinions about functions of pachak pitta and digestive enzymes seperatly.	Cognitive (Comprehension)	Nk	Kh	Group discussion	Self-assessment	SA	II	
CO 1	Describe *ranjaka* pitta with their specific locations, properties and functions.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion Demonstration	Written/ Viva voce	F & S	II	
CO 1	Describe role of *ranjaka* pitta in *rasaranjan* process as per different *aacharyas*.	Cognitive (Comprehension)	Dk	Kh	Lecture	Written/ Viva voce	F & S	II	
CO 1	Interprete stages of erythropoiesis and role of intrinsic factor, vit. B_{12} etc in hemopoiesis.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion Seminar	Written/ Viva voce	F & S	II	
CO 1	Describe *alochaka*, *bhrajaka*, *sadhaka* pitta with their specific locations, properties and functions.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion Demonstration	Written/ Viva voce	F & S	II	
CO 1	Discuss rhodopsin and iodopsin along with *alochaka pitta* and note down	Cognitive (Recall)	Nk	Kh	Self study	Self-assessment	SA	II	

CO 1	Elaborate the functions of bhrajaka pitta in term physiology.	Cognitive (Comprehension)	Nk	Kh	Self study	Self-assessment	SA	II	
CO 1	Describe the role of *sadhaka* pitta in *sadhana*, concentration and observe changes upon heart rate and respiratory rate	Attitude (Imitation)	Nk	Sh	Discussion Demonstration	Self-assessment	SA	II	
CO 1	Find out similarities and differences between fuctions of sadhaka pitta and neurotransmitter.	Cognitive (Analysis)	Nk	Kh	Self study	Self-assessment	SA	II	
CO 1	Explain difference between *kshaya* & *vriddhi lakshana* of *pitta Dosha*	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	II	
CO 5	Interpret which type of *pitta dosha* gets vitiated and in which clinical condition the use of proper *aahar dravya* is prevalent as per *kshaya*, *vriddhi* of *pitta dosha*.	Cognitive (Application)	Dk	Sh	Demonstration Discussion PBL	Written/ Viva voce	F & S	II	*Swasthavrutta*
CO 1	Distinguish the similarities & differences between *agni* and *pitta* in terms of their *guna* with examples in compendia.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion PBL Seminar	Written/ Viva voce	S	II	
CO 1	Make inferences and find evidences / examples in daily regimen to support generalization of *agni* & *pitta* statement.	Cognitive (Analysis)	Nk	Sh	Demonstration Discussion Assignment PBL/CBL	Self-assessment	SA	II	
CO 1	Recite and explain the important verses of *pitta dosha*. (ex-	Cognitive (Recall)	Dk	Kh	Discussion Recitation	Written/ Viva voce	F & S	II	

	sthana, karma, types, vriddhi and kshaya)								
	Topic 6 – *Kapha dosha* (5 hr) [Lecture: 4 hours, non-lecture: 1 hour]								
CO 1	Define the *vyutpatti* and *nirukti* of *kapha dosha*.	Cognitive (Recall Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	II	
CO 1	Describe general properties & functions of *kapha dosha* and demonstrate the normal *guan, karma* of *kapha dosha* in a healthy person.	Cognitive (Recall) (Application)	Mk	Kh	Lecture Discussion Demonstration	Written/ Viva voce Skill assessment	F & S	II	
CO 1	Enlist five types of *kapha dosha* & describe *bodhaka kapha kledaka, tarpaka* with their specific locations, properties and functions.	Cognitive (Recall)	Mk	Knows	Lecture Discussion	Written/ Viva voce	F & S	II	
CO 1	Identify the role of saliva in taste perception and also in other way.	Cognitive (Comprehension)	Dk	Kh	Lecture Discussion	Written/ Viva voce	F & S	II	
CO 1	Describe role of *kledaka kapha* in lubricating and protective properties of mucus.	Cognitive (Comprehension)	Dk	Kh	Lecture Discussion	Written/ Viva voce	F & S	II	
CO 1	Describe the role of *tarpaka kapha* in protects the sensory organs.	Cognitive (Comprehension)	Dk	Kh	Lecture Discussion	Written/ Viva voce	F & S	II	
CO 1	Describe *avalambaka, sleshaka* with their specific locations, properties and functions.	Cognitive (Recall)	Mk	Knows	Lecture Discussion	Written/ Viva voce	F & S	II	
CO 1	Describe the role of	Cognitive	Dk	Kh	Lecture	Written/	F & S	II	

	avalambaka in heart protection and *sleshaka kapha* in arthritis.	(Comprehension)			Discussion	Viva voce			
CO 1	Explain difference between *kshaya* & *vriddhi lakshana* of *kapha Dosha*	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	II	
CO 1	State importance of *prakrit shleshmik bala* / *veerya & vikrit shleshmik* mala & find out significance of above cognitive in applied aspect	Cognitive (Application)	Nk	Kh	Lecture Discussion	Self-assessment	SA	II	*Kayachikitsa*
CO 5	Interpret which type of *kapha dosha* gets vitiated and in which clinical condition the use of proper *aahar dravya* is prevalent as per *kshaya, vriddhi of kapha dosha*.	Cognitive (Application)	Nk	Sh	Demonstration Discussion PBL	Viva voce	F & S	II	*Swasthavrutta*
CO 1	Recite and explain the important verses of *kapha dosha*. (ex- *sthana, karma, vriddhi and kshaya*)	Cognitive (Recall & Comprehension)	Dk	Sh	Discussion Recitation	Written/ Viva voce	F & S	II	
CO 1	Describe neural & chemical communication system of body	Cognitive (Comprehension)	Nk	Kh	Self study	Self-assessment	SA	II	
	Topic 7 – *Dosha Vriddhi-Kshaya* (Hyper and hypo state of dosha) (2 hr) [Lecture: 1 hour, non-lecture: 1 hour]								
CO 1	Describe etiological factors causing *tridosha vriddhi & kshaya* on the basis of *dravya, guna, karma, aahaar & vihara*.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	II	*Dravyaguna*
CO 1	Describe, observe and interpret individual	Cognitive (Comprehension	Nk	Sh	Demonstration Discussion	Self-assessment	SA	II	

	causes and symptoms of *panchavidha vataprakopa.* (*Ashtanga Hridaya nidana sthana* 16)	Application)			PBL				
CO 1	Describe *vriddhi-kshaya lakshana of vata dosha*	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	II	
CO 1	Describe *vriddhi & kshaya lakshana of pitta* and *kapha dosha*	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	II	
CO 1	Enumerate the *nanatmaj vyadhi of tridosha*	Cognitive (Recall)	Nk	K	Lecture	Self-assessment	SA	II	
	Topic 8 – *Kriyakala* (Treatment as per prevalent kala) (2 hr) [Lecture: 1 hour, non-lecture: 1 hour]								
CO 1	Explain the Concept of *kriyakala* & enumerate stages of *kriyakala*.	Cognitive (Recall) (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	II	*Rognidan Vikriti Vidnyan*
CO 1	Describe the stages *sanchaya*, *prakopa*, *prasara* of *kriyakala*.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	II	
CO 1	Describe the stages *sthansanshraya*, *vyaktavastha* & *bhedavastha* of *kriyakala*.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	II	
CO 1	Describe the applied physiology of diseases produced due the vitiation of *vata*, *pitta* and *kapha*.	Cognitive (Comprehension)	Nk	Sh	Lecture Discussion	Self-assessment	SA	II	
CO 1	Describe ideas given in the *shat-kriyakala* about preventive measures	Cognitive (Comprehension)	Nk	Kh	Group discussion	Self-assessment	SA	II	
	Topic 9 – *Prakriti* (*Deha- Prakriti, Manasa- Prakriti*) (Body constitution, personality, temperament of individuals) (10 hr) [Lecture: 7 hours, non-lecture: 3 hours]								
CO 1	Define the term *prakriti* and describe etymology & different	Cognitive (recall)	Mk	K	Lecture Discussion	Written/ Viva voce	F & S	II	

	meanings of the term *prakriti*.								
CO 1	Describe the role of different *matrijadi bhava* (genetic, intra-uterine and extra-uterine factors) influencing *prakriti* according to *Charaka and Sushruta*	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion Symposium	Written/ Viva voce	F & S	II	
CO 1	Describe the classification of different *prakriti* according to various Samhitas	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	II	
CO 1	Enumerate types of *deha prakriti* and classify *deha prakriti* into eka-*doshaja*, *dvanvaja*, *samadoshaja*.	Cognitive (Recall)	Mk	Kh	Lecture Discussion Model Demonstration	Written/ Viva voce	F & S	II	
CO 1	Describe the *guna* (attributes) of *vata* prakriti according to *Charaka* Samhita	Cognitive (Comprehension)	Mk	Sh	Lecture Discussion Model Demonstration	Written/ Viva voce	F & S	II	
CO 1	Describe the *guna* (attributes) of pitta prakriti according to *Charaka* Samhita	Cognitive (Comprehension)	Mk	Sh	Discussion Role play real life experience	Written/ Viva voce	F & S	II	
CO 1	Describe the *guna* (attributes) of *kapha* prakriti according to *Charaka* Samhita	Cognitive (Comprehension)	Mk	Sh	Lecture Discussion video show Simulation	Written/ Viva voce	F & S	II	
CO 1	Describe *guna* of *vata*, *pitta* & *kapha prakriti* according to Vagbhata (abhiruchi) & *Sushruta samhita* (*anukatva*)	Cognitive (Comprehension)	Mk	Sh	Discussion Model Demonstration Team project work, Tutorial	Written/ Viva voce	F & S	II	
CO 1	Describe the *guna* (attributes) of *vata*, *pitta* & *kapha prakriti* according to	Cognitive (Comprehension)	Nk	Sh	Discussion	SA	SA	II	

	Sharangadhara Samhita								
CO 1	Describe the relationship between individual *prakriti* & *agni, koshtha.*	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	II	
CO 1	Describe classification of *bhautik prakriti* and characteristic features of the individuals belonging to each kind of *bhautik prakriti*.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	II	
CO 1	Describe classification of manas *prakriti* and characteristic features of the *satvic prakriti*.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	II	
CO 1	Describe the characteristic features of *rajasic* & *tamasic* manas *prakriti*.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	II	
CO 1	Describe classification of and characteristic features of the individuals belonging to each kind of *jatyadi-prakriti*	*Cognitive (Comprehension)*	*Mk*	*Kh*	*Lecture Discussion*	*Written*	*F & S*	II	
CO 1	Similarities and difference between the *sharirik* & *manas prakriti* descriptions given in various Samhitas.	Cognitive (Comprehension)	Dk	Kh	Discussion Team project work	Written	F	II	*Kayachikitsa*
CO 1	Significance of the Cognitive of *prakriti* in clinical aspect and *pathya-apathya kalpana* in *ahara* and *vihara* of each type of *prakriti*.	Cognitive (Comprehension)	Mk	Kh	Discussion Self-learning Buzz group	Written Role play	F & S	II	
CO 1	Appreciate the use of various validated tools for assessing	Cognitive (Application)	Mk	Sh	Discussion Tutorial, Demonstration	Written/ Viva voce	F & S	II	

	Ayurvedic concept of human constitution (prakriti) (software/ questionnaire) to evaluate *prakriti*- Ex-CCRAS portal								
CO 1	Describe the relevance of *desha-kala-ritu-vaya-ahara-vihara-satmya*, *aushadha* of parents especially of mother on *prakriti* of individual.	Cognitive (Application/ Analysis)	Dk	Kh	Tutorial, Discussion	Viva voce Seli-assessment	SA	II	*Kayachikitsa*
CO 1	Appreciate the application of recent advances in the domain of research related to *prakriti* (genetic, physiological basis)	Cognitive (Application/ Analysis)	Nk	Kh	Discussion	Seli-assessment	SA	II	
CO 1	Recite and explain the important verses of *vata*, *pitta* & *kapha doshaja prakriti*.	Cognitive (Recall & Comprehension)	Dk	Kh	Discussion Recitation	Written/ Viva voce	F & S	II	
CO 1	Observe distinguish features of individuals of three contrasting *prakriti* types v*ata, pitta* and k*apha by* IGIB. Link: https://doi.org/10.1186/1479-5876-6-48	Cognitive (Application)	Nk	Sh	Team project work	Team assessment	TA	II	
CO 1	Observe standardized prakriti assessment tool by CCRAS. Link: doi/10.5005/jp-journals-10064-0019	Cognitive (Application)	Nk	Sh	Team project work	Team assessment	TA	II	
CO 1	Compare human constitution (prakriti) & genomic	Cognitive (Comprehension)	Nk	Kh	Group discussion	Self-assessment	SA	II	
CO 1	Record the known physiological variation	Cognitive (Application)	Dk	Kh	Real life experience	Demonstration	SA	II	

	of your friends in different *rutu* as per different *prakriti.*				Role play				
CO 1	Discuss correlation of genotype and phenotype with *prakriti*.	Cognitive (Comprehension)	Nk	Kh	Group discussion	Self-assessment	SA	II	
CO 1	Trace interrelationship between aging and prakriti	Cognitive (Comprehension)	Nk	Kh	Discussion	Self-assessment	SA	II	
CO 1	Point out hematological difference as per different prakriti.	Cognitive (Analysis)	Nk	Kh	Survey	Self-assessment	SA	II	
CO 1	Discuss *manas prakrIti* and personality.	Cognitive (Comprehension)	Dk	Kh	Role pay	Self-assessment	SA	II	
CO 1	Role of prakriti (Ayurgenomics) in the concept of personalised medicine	Cognitive (Comprehension)	Nk	Kh	Group discussion Seminar	Self-assessment	SA	II	
CO 1	Explore thes Immunophenotyping & human dosha prakriti.	Cognitive (Comprehension)	Nk	Kh	Online material	Self-assessment	SA	II	
	Topic 10 – *Ahara* (Diet and nutrition in Ayurveda) (4 hr) [Lecture: 3 hours, non-lecture: 1 hour]								
CO 1	Describe the *Nirukti* (etymology)& *paribhasa* (definition) of ahar.	Cognitive (Recall)	Mk	K	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Describe the *Bheda* (classification) and *upayogita* (importance) of *ahara*.	Cognitive (Recall)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Define, enlist and describe- the types of *ahara* in detail with examples	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion Tutorial	Written/ Viva voce	F & S	III	

CO 1	Define, enlist and describe *ashta ahara-vidhi-viseshayatana* (8 factors to be considered while preparing and processing the food) in detail with examples	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion Seminar	Written/ Viva voce	F & S	III	*Swathavritta*
CO 1	Describe *ahara vidhi vidhana* (rules for consuming the food) in detail with examples.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Explains the role of *ahara vidhi vidhana* in the context of present-day lifestyle, cooking habits and eating behaviour.	Cognitive (Comprehension)	Dk	Kh	Lecture Discussion Real life experience Evidance based learning	Written/ Viva voce	F & S	III	
CO 1	Define, enlist and describe *ahara parinamkara bhava* (factors responsible for proper digestion) and the importance of each of these factors in the process of digestion	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Explain the concept of *viruddha ahara* (incompatible diet) and its relevance in present-day food processing methods and dietary consumption behaviour in individuals.	Cognitive (application)	Dk	Sh	Lecture Discussion Observation	Written/ Viva voce	SA	III	*Swathavritta*
CO 1	Explain the role of *ahara* in today's aspect related to *anupana* habits etc.	Cognitive (application)	Nk	Sh	Lecture Discussion	Self assessment	SA	III	
CO 1	Explain the role in today’s lifestyle of food, compatible food, the proper time for	Cognitive (application)	Nk	Sh	Lecture Discussion Assignment	Self-notes	SA	III	

	food taking, practice regarding food intake etc. in individual's health.								
CO 1	Explain dietary guidelines, how to eat food in Ayuvedic view.	Cognitive (application)	Nk	Kh	Lecture Discussion	Self assessment	SA	III	
	Topic 11 – *Agni* (The digestive fire of the body) (5 hr) [Lecture: 4 hours, non-lecture: 1 hour]								
CO 1	Describe different meanings of *agni* in different contexts and define *agni* in the context of *kriya sharir.*	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	State the importance of *agni* in maintaining the different aspects of human physiology	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Enumerate and explain the different synonyms of *agni* regarding *kriya sharir.*	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Enumerate and define various classifications of *agni* concerning their locations and functions in the body	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Describe the physiological roles of *jatharagni*, *bhutagni* and *dhatvagni* and explain the differences and similarities between the three.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	*Kayachikitsa*
CO 1	Classify and explain the features of four functional / abnormal states of *jatharagni: samagni, vishamagni, mandagni & tikshnagn*i and explain evaluation process of *jarana-*	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	*Rognidan*

	shakti.								
CO 1	Enumerate the factors affecting the normal functioning of Agni and the symptoms of improper functioning of *agni* seen in certain clinical conditions	Cognitive (Comprehension)	Dk	Kh	Lecture Discussion	Viva voce	F	III	
CO 1	Enumerate and discuss different entities in the body that can represent different forms of *agni* from the contemporary physiology and biochemistry (hormones, enzymes etc) point of view	Cognitive (Comprehension)	Nk	Kh	Lecture Discussion	Self assessment Debate	SA	III	
CO 1	Record the opinions among your friends on the concept of free radicals & antioxidant	Cognitive (Application)	Nk	Sh	Team project work	Team assessment	TA	III	
CO 1	Identify digestive and metabolic functions of *Agni* & its clinical importance.	Cognitive (Application)	Nk	Sh	Group discussion	Self Assessment	SA	III	
CO 1	Distinguish the similarities & differences between *agni* and *pitta* in terms of their *guna* with examples in compendia. (mentioned in pitta also)	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion PBL	Written/ Viva voce	S	III	
	Topic-12. *Annapachana* / *Aahara-paka* (Digestion and metabolism in Ayurveda) (9 hr) [Lecture: 7 hours, non-lecture: 2 hours]								
CO 1	Describe the *annavaha srotas* along with its *mula sthana*	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Enumerate and describe different organs of *annavaha*	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	

	srotas and their important functions. according to Ayurveda and contemporary physiology								
CO 1	Describe three stages of digestion: *madhura, amla* and *katu avasthapaka* in detail	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion Tutorial	Written/ Viva voce	F & S	III	
CO 1	Describe the process of *udeerana* (increase/ release) of *vata, pitta, kapha* during *avasthapaka*	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Describe the formation of *prakrit* and *vaikrit dosha* (*prasadbhuta, malabhuta dosha*) and their role.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	*Rognidan*
CO 1	Describe the definition of *vipaka* (*nisthapaka*) and classification of *vipaka*.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Describe how to identify *vipak* of *aahar* as per their effect on the body.	Cognitive (application)	Dk	Sh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Describe the similarities and differences between *avasthapaka* and *nishthapaka*	Cognitive (Comprehension)	Mk	K	Lecture Discussion	Written/ Viva voce	F & S	III	

CO 1	Explain the role of different sub-types of *dosha* in the process of digestion: *bodhaka kapha, prana vayu, kledaka kapha, samana vayu, pachaka pitta, apana vayu* etc.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	

CO 1	Describe the process of separation of *saara* and *kitta*	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	State the application of the theory of *pilu-paka* and *pithara paka* in *aharapaka*	Cognitive (Comprehension)	Nk	Kh	Lecture Discussion	Self-assessment	SA	III	
CO 1	Explain the role of *grahani* & *pittadhara kala* & describe possible relation between *pittadhara* and *majjadhara* kala.	Cognitive (Comprehension)	Dk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	State the importance of *pachaka pitta* and *jatharagni* in the process of digestion	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Explain the role of *bhutagni* and *dhatvagni* in *ahara parinaman*	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Describe the process of formation of *ahara-rasa* and absorption of *sara bhaga* / *anna-veerya*	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Draw parallels between the different types of *agni* and various digestive enzymes and hormones	Cognitive (Comprehension)	Dk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Define *ahara gati, abhyavaharana shakti, annagrahana, pachana, vivechana, munchana and jaranashakti*	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Discuss applied clinical aspect of *annavaha srotas*: *arochaka, ajirna, atisara, grahani, chardi, parinama shula* etc	Cognitive (Comprehension)	Dk	Kh	Lecture Discussion	Viva voce CBD	F & S	III	

CO 1	Define different meanings of the term *koshtha* and explain the term in the context of *kriya sharira*	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Enumerate the different types of *koshtha* according to the predominance of *dosha* (*krura-mridu and madhya*)	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	*Panchakarma*
CO 1	State clinical significance of *koshtha* and the process of evaluating *koshtha* in an individual.	Cognitive (Comprehension)	Dk	Kh	Lecture Discussion	Written/ Viva voce DOPS	F & S	III	
	Part B (40 Hours) –								
	Topic 1 - Physiology Homeostasis (6 hr) [Lecture: 5 hours, non-lecture: 1 hour]								
CO 1	Define homeostasis and describe mechanisms of maintenance of homeostasis.	Cognitive (Recall/ Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	
CO 1	Distinguish between the shell temperature and core temperature	Cognitive (Recall/ Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	
CO 1	Define the terms Cell death, Cell degeneration, Cell aging. Describe animal tissue.	Cognitive (Recall/ Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	
CO 1	Describe mechanism of positive and negative feedback system with at least two examples.	Cognitive (Recall/ Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	
CO 1	Describe the structure and function of cell, cell membrane, cytoplasmic	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	

	organelles, genetic material (DNA & RNA.)								
CO 1	Explain the process of DNA replication & inhibitors of replication.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	
CO 1	Describe the acid-base balance, water and electrolyte balance.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	
CO 1	Describe the concept of pH & buffer systems in the body and Na-K pump	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	
CO 1	Describe and discuss transport mechanisms across cell membranes. (Active & facilitated)	Cognitive (Comprehension)	Dk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	
CO 1	Describe and discuss the molecular basis of resting membrane potential and action potential	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	
	Topic 2 - Physiology of respiratory system: (7 hr) [Lecture: 5 hours, non-lecture: 2 hours]								
CO 1	Describe divisions of the respiratory system based on its functions.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	
CO 1	Describe pulmonary circulation.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	
CO 1	Describe the mechanics of normal respiration, pressure changes during ventilation.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	
CO 1	Describe the lung volume and capacities, compliance, diffusion of lungs	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	
CO 1	Describe and discuss the exchange and transport of gases - Oxygen and Carbon dioxide	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion Seminar	Written/ Viva voce	F & S	I	

CO 1	Describe the neural and chemical control of respiration.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	
CO 1	Describe physiological situations that affect respiration and discuss artificial respiration, dyspnoea, asphyxia, hypoxia, cynosis.	Cognitive (Comprehension)	Dk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	
CO 1	Describe Haldane effect & Kussmaul breathing.	Cognitive (Comprehension)	Nk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	
CO 1	Describe basic of pulmonary function tests.	Cognitive (Comprehension)	Nk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	
	Topic 3 - Physiology of Gastrointestinal system (9 hr) [Lecture: 7 hours, non-lecture: 2 hours]								
CO 1	Describe enzyme and its fuctions in metabolism	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	II	
CO 1	Describe functional anatomy and physiology of the digestive system	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	II	
CO 1	Describe the functions of salivary glands, stomach, liver, gall bladder pancreas, small intestine, large intestine in the process of digestion and absorption.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	II	
CO 1	Describe the mechanism of secretion,composition, functions, and regulation of saliva, gastric, pancreatic, intestinal juices and bile secretion	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	II	
CO 1	Describe GIT movements deglutition, peristalsis, defecation and control	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	II	
CO 1	Describe the major components of food, the process of digestion and	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion Seminar	Written/ Viva voce	F & S	II	

	metabolism of proteins, fats and carbohydrates								
CO 1	Describe the physiological role of vitamins	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	II	
CO 1	Describe the Gut-Brain Axis and enteric nervous system, and its function	Cognitive (Comprehension)	Dk	Kh	Lecture Discussion	Written/ Viva voce	F & S	II	
CO 1	Discuss the physiology aspects of gastro-oesophageal reflux disease, vomiting, diarrhoea, constipation	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	II	
	Topic 4 - Physiology of Nervous System (10 hr) [Lecture: 7 hours, non-lecture: 3 hours]								
CO 1	Describe organization of nervous system.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Describe the mechanism of propagation of nerve impulses.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Describe the functions & properties of synapse, reflex, receptors	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Describe the functional anatomy of the central nervous system (CNS) and peripheral nervous system (PNS)	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion Seminar	Written/ Viva voce	F & S	III	
CO 1	Describe the physiology of autonomous nervous system (ANS)	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Describe the physiology of sensory (general sensations) and motor nervous system	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Describe and discuss spinal cord, its functions, lesion & sensory disturbances	Cognitive (Comprehension)	Dk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Describe and discuss functions of the cerebral cortex, basal ganglia,	Cognitive (Comprehension)	Nk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	

	thalamus, hypothalamus cerebellum, mid brain, pons and medulla oblongata.								
CO 1	Describe and discuss the physiological basis of intelligence, memory, learning and motivation.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Describe the physiology of cranial nerves	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Describe physiology of speech and articulation.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Describe physiology of temperature regulation.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Describe the physiology of pain	Cognitive (Comprehension)	Nk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
	Topic 5 - Physiology of Endocrine glands (8 hr) [Lecture: 6 hours, non-lecture: 2 hours]								
CO 1	Enlists and describe hormones & endocrine glands based on synthesis, secretion, transport, physiological actions, regulation.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Describe hormones secreted by anterior & posterior pituitary gland, their functions, disorders of pituitary gland (hyper & hypo activity)	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Describe hormones secreted by the Thyroid gland, their functions & disorders of Thyroid and parathyroid gland (hyper and hypoactivity)	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion Seminar	Written/ Viva voce	F & S	III	
CO 1	Describe hormones secreted by Pancreas,	Cognitive (Comprehension)	Nk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	

	their functions & disorders of Pancreas (hyper and hypoactivity)								
CO 1	Describe hormones secreted by Adrenal cortex gland, their functions & disorders of Adrenal cortex gland (hyper and hypoactivity)	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Describe hormones secreted by Adrenal medulla gland, their functions & disorders of Adrenal medulla (hyper and hypoactivity)	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Enlist other Glands and their functions	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Describe the synthesis and functions of local hormones	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	

PAPER II

A3 Course outcome	B3 Learning Objective (At the end of the session, the students should be able to)	C3 Domain/sub	D3 Must to know/ desirable to know/Nice to know	E3 Level Does/ Shows how/ Knows how/ Know	F3 T-L method	G3 Assessment	H3 Formative /summative	I3 Term	J3 Integration
	AyGU-KS								
	Paper II (60 Hours)								
	Topic-1. Introduction to *Dhatu* (3 hr) [Lecture: 2 hours, non-lecture: 1 hour]								
CO 1	Explain the etymology, derivation, definition, synonyms and general	Cognitive (Recall)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	*Sanskrit Samhita/*

	introduction of the term *dhatu.*								*Rognidan Vikriti Vidnyan*
CO 1	Explain the difference between *dhatu* and *upadhatu*.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	
CO 1	Explain different theories related to *dhatuposhana Nyaya* (nourishment of different *dhatus*).	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion Seminar	Written / Viva voce	F & S	I	
CO 1	Explain the applicability of nyaya in the different physiological mechanisms.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion Jigsaw	Written/ Viva voce	F & S	I	
CO 1	Describe *utpatti & poshana* of dhatu.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	
CO 1	Compile various terminologies related to *dhau gati* and *dhatu poshana*	Cognitive (Comprehension)	Dk	Sh	Assignment Tutorial	Self-assessment	SA	I	
CO 1	Mention your opinion about *nyaya* concept on the basis of different metabolic pathways, transformation, transport of substances through cell membrane.	Cognitive (Application)	Nk	Kh	Group discussion Buzz group	Self-assessment	SA	I	
CO 1	Discuss theory of tissues formation and differentiation in context with physiological changes of aging.	Cognitive Application)	Nk	Kh	Group discussion Homework based assignment	Self-assessment	SA	I	
CO 1	Discuss stem cells along with concepts of regeneration in Ayurveda	Cognitive (Recall/ Comprehension)	Nk	Kh	Lecture Online teaching aids	self assessment	SA	I	
CO 1	Study Ayurvedic aspect of *dhatu sarata* and its application	Cognitive (Application)	Nk	Kh	Group discussion Seminar	Self-assessment	SA	I	
	Topic-2. *Rasa Dhatu* (5 hr) [Lecture: 4 hours, non-lecture: 1 hour]								

CO 1	Explain the etymology, derivation, location, properties, functions and *pramana* of r*asa-dhatu. panchabhautikatva* of *rasa dhatu*.	Cognitive (Recall)	Mk	K	Lecture Discussion	Written/ Viva voce	F & S	I	
CO 1	Describe the functions of *rasavaha srotas* & *mula* of *rasavaha srotas*.	Cognitive (Recall)	Mk	K	Lecture Discussion	Written/ Viva voce	F & S	I	
CO 1	Describe the process of formation of *rasa dhatu* from *aahara rasa*, and circulation of *rasa-rakt*a (*rasa-rakta samvahana*)	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	
CO 1	Describe *kshaya-vriddhi* & *rasapradoshaja vikara*	Cognitive (Comprehension)	Mk	Kh	Lecture Assignment	Written/ Viva voce	F & S	I	
CO 1	Description of functioning of *hridaya* and physiological significance of *hridaya.*	Cognitive (Comprehension)	Dk	Kh	Lecture Discussion Flipped classroom	Written/ Viva voce	F & S	I	
CO 1	Description of *sira, dhamani and srotas*	Cognitive (Comprehension)	Nk	Kh	Discussion Video show	Written/ Viva voce	F & S	I	
CO 1	Enumerate *ashtavidha sara* (8 types of *sara*), and describe the features of individuals belonging to *tvak-saara purusha*.	Cognitive (Recall)	Mk	K	Lecture, Role play, real life experience, Discussion Brainstrorming	Written/ Viva voce	F & S	I	
	Topic-3. *Rakta Dhatu* (4 hr) [Lecture: 3 hours, non-lecture: 1 hour]								
CO 1	Explain the etymology, derivation, synonyms, location, properties, functions and *pramana of rakta* dhatu & explain the *panchabhautikatva of rakta dhatu*,	Cognitive (Recall)	Mk	K	Lecture Discussion	Written/ Viva voce	F & S	I	
CO 1	Describe the physiology of *raktavaha srotas*, and describe the *mula of rakta-vaha srotas* and mutual interdependence of *rakta and pitta.*	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	

CO 1	Describe the formation of *rakta-dhatu, ranjana of rasa* by Ranjaka *pitta*, features of *shuddha rakta*, specific functions of *rakta*	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	
CO 1	Describe the characteristics of *raktasaara* Purusha	Cognitive (Recall)	Mk	K	Lecture Discussion	Written/ Viva voce	F & S	I	
CO 1	Describe the manifestations of *kshaya and vriddhi* and name *pradoshaja vikara* of *raktadhatu*	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion Assignment	Written/ Viva voce	F & S	I	*Vikriti Vigyana*
CO 1	Elaborate the concept about inclusion or exclusion of rakta dhatu as a fourth dosha.	Cognitive (Comprehension)	Nk	Kh	Discussion Brainstorming	Written/ Viva voce	F	I	
	Topic-4. *Mamsa Dhatu* (3 hr) [Lecture: 2 hours, non-lecture: 1 hour]								
CO 1	Describe the etymology, derivation, synonyms, location, properties and functions of *mamsa dhatu*, physiology of *mamsavaha srotas*, *mula* of *mamsavaha srotas*	Cognitive (Recall)	Mk	K	Lecture Discussion	Written/ Viva voce	F & S	II	
CO 1	Describe the formation of *mamsa dhatu* and the definition of *peshi* characteristics of *mamsasaara purusha*,	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	II	
CO 1	Describe manifestations of *kshaya* and *vriddhi* of *mamsa* Dhatu & describe the physiological basis of these manifestations. Name *mamsa pradoshaja vikara.*	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion Assignment	Written/ Viva voce	F & S	II	*Vikriti Vigyana*
	Topic-5. *Meda Dhatu* (4 hr) [Lecture: 3 hours, non-lecture: 1 hour]								

CO 1	Describe the etymology, derivation, location, properties, functions and *pramana* of *meda dhatu*.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	II	
CO 1	Describe the *medovaha srotas*, its *mula*, the physiology of *medovaha srotas*, formation of *medo dhatu*	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	II	
CO 1	Describe the characteristics of *medasaara purusha* and manifestations of *kshaya* and *vriddhi* of *meda*. Name *meda pradoshaja vikara.*	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion Assignment	Written/ Viva voce	F & S	II	
CO 1	Describe the clinical features of *sthaulya* and *karshya* along with the physiological basis of these clinical conditions	Cognitive (Comprehension)	Dk	Kh	Lecture Discussion	Written/ Viva voce	F & S	II	*Vikriti Vigyana*
CO 1	Record the properties of lipid & mamsa dhatu.	Cognitive (Comprehension)	Nk	Kh	Discussion	Self assessment	F	II	
	Topic-6. *Asthi Dhatu* (3 hr) [Lecture: 2 hours, non-lecture: 1 hour]								
CO 1	Describe the definition, synonyms, classification, properties (*guna*), and formation of *asthi dhatu.*	Cognitive (Comprehension)	Mk	K	Lecture Discussion	Written/ Viva voce	F & S	II	
CO 1	Describe the *asthi dhara kala*; relation with *purishdharakala* and the features of *asthi sarata*.	Cognitive (Comprehension)	Mk	K	Lecture Discussion	Written/ Viva voce	F & S	II	
CO 1	Describe the applied physiology of *asthi dhatu (asthi vriddhi/ asthi kshaya)* and name *asthi pradoshaja vikara*	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion Assignment	Written/ Viva voce	F & S	II	*Vikriti Vigyana*

	Topic-7 *Majja Dhatu* (4 hr) [Lecture: 3 hours, non-lecture: 1 hour]								
CO 1	Describe the definition, synonyms and location (*sthana*) of *majja dhatu.*	Cognitive (Recall)	Mk	K	Lecture Discussion	Written/ Viva voce	F & S	II	
CO 1	Describe the formation of *majja dhatu majjavaha srotas* and its *mula.*	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	II	
CO 1	Describe *majja dhara kala* in relation with *pittadhara kala* and the features of *majja sarata.*	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	II	
CO 1	Describe applied physiology of *majja dhatu (majja vriddhi and kshaya)* and name *majja pradoshaja vikara*	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion Assignment	Written/ Viva voce	F & S	II	*Vikriti Vigyana*
CO 1	Comment on concept of m*ajja dhatu* and bone marrow	Cognitive (Comprehension)	Dk	Kh	Discussion Online teaching aids	Self assessment	F	II	
	Topic-8. *Shukra Dhatu* (4 hr) [Lecture: 3 hours, non-lecture: 1 hour]								
CO 1	Describe the etymology and derivation of *shukra dhatu*, location, properties, *pramana* functions of *shukra dhatu*.	Cognitive (Recall)	Mk	K	Lecture Discussion	Written/ Viva voce	F & S	II	
CO 1	Describe the formation of *shukra dhatu*, *poshana krama* and its *updathu* and *mala*.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion Puzzle	Written/ Viva voce	F & S	II	
CO 1	Describe the mula of *shukravaha srotas* and the properties of *shuddha shukra* along with *shukra saara purusha* symptoms.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	II	
CO 1	Describe the features of *kshaya* & *vriddhi* of	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	II	*Vikriti Vigyana*

	shukra dhatu & *shukra pradoshaja vikara*				Assignment				
CO 4	Identify histological structure explain structure of different tissue (dhatu)	Cognitive (Comprehension) Psychomotor	Mk	Kh	Demonstration Perform	Practical Skill assessment OSPE	F & S		
	Topic-9. *Ashraya- Ashrayi Bhava* (2 hr) [Lecture: 1 hour, non-lecture:1 hour]								
CO 1	Describe the concept of *ashraya-ashrayi bhava* i.e. inter-relationship among *dosha, dhatu mala and srotas*.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	*Vikriti Vigyana*
CO 1	Describe the applied physiology of diseases affecting *saptadhatu* enlisted under dhatu *pradoshaja vikara*.	Cognitive (Comprehension)	Dk	Kh	Discussion Seminar	Written	F	III	
CO 1	Explain use of *Ashraya-Ashrayi Bhava* in laghan bruhan.	Cognitive (application)	Nk	Kh	Discussion	Self-assessment	SA	III	
	Topic -10. *Oja* (4 hr) [Lecture: 3 hours, non-lecture: 1 hour]								
CO 1	Recall etymological derivation, definition, classification, and *pramana* of *oja*	Cognitive (Recall)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Describe the process of formation of *ojas* along with locations and properties	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Describe the concept of *vyadhikshamatva*, explain *bala vriddhikara* bhava.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Classify *bala* and describe etiological factors (*kshaya karan*) for *oja visramsa, vyapat and kshaya* and elaborate	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	*Vikriti Vigyana*

	the manifestation of these clinical conditions.								
CO 1	Collect different opinoins on oja given by different aacharya and try to understand the logic behind it.	Cognitive (Recall)	Nk	Kh	Discussion	Written	F	III	
CO 1	Interpret your opinion about oja-bala-kapha in its normal state.	Cognitive (Recall)	Nk	Kh	Discussion	Self-assessment	SA	III	
	Topic-11. *Upadhatu* (7 hr) [Lecture:6 hours, non-lecture: 1 hour]								
CO 1	Describe the general introduction, etymological derivation and definition of the term *upadhatu*	Cognitive (Recall)	Mk	K	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Describe the formation, nourishment, properties, location and functions of each *upadhatu*.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Describe the characteristic features and methods of assessing *shuddha* and *dushita stanya*.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	*Vikriti Vigyana*
CO 1	Describe the characteristic features of *vriddhi* and *kshaya* of *stanya*.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Describe characteristic features of *shuddha* and *dushita artava* along with enumerating the differences between *raja* and *artava*.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Describe *artava-vaha srotas* and its *mula* along with the common clinical conditions related to *artava-vaha srotas*	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	*Vikriti Vigyana*

	(kashtartava, vandhyata, pradara etc).								
CO 1	Describe the classification, thickness of each layer and functions of *tvak*	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Interpret the skin layer as per contemporary science.	Cognitive (Recall)	Nk	Kh	Discussion	Written	F	III	
	Topic 12. *Mala* (8 hr) [Lecture: 6 hours, non-lecture: 2 hours]								
CO 1	Describe the etymological derivation and definition of the term *mala*.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Enumerate *aharamala* and describe of the process of formation of *aharamala*.	Cognitive (Recall)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Describe the etymological derivation, definition, formation, properties, quantity and functions of *purisha*.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Describe the physiology of *purishavaha srotas, purish visarjana* and manifestations of *vriddhi* and *kshhaya* of *purisha*.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Explain the relation between *purishdhara kala* and *asthidhara kala*.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Describe the etymological derivation, definition, formation, properties, quantity and functions of *mutra*.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Describe the physiology of *mutravaha srotas* and the process of urine formation and *mutra visarjana* in Ayurveda.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	

CO 1	Explain the manifestations of *vriddhi* and *kshhaya* of *mutra*.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Explain the urge of micturition & defecation in perspective of reflexes	Cognitive (Application)	Nk	Kh	Discussion	Self-assessment	SA	III	
CO 1	Describe and enumerate *dhatumala* and describe the functions of each type of *dhatumala*	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Explain the etymological derivation, definition, formation and functions of *sveda.*	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Explain the functions of *svedvaha srotas* along with describing the manifestations of *vriddhi and kshaya of sveda*.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Review Ayurveda compendia for several colour of purish and mutra as per their different diseased conditions.	Cognitive (Application)	Nk	Kh	Discussion	Self-assessment	SA	III	
	Topic 13. *Indriya vijnyana* (2 hr) [Lecture: 1 hour, non-lecture: 1 hour]								
CO 1	Describe the *pancha-jnyaanendriya* and physiology of perception of *shabda, sparsha, rupa, rasa and gandha*.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion Tutorial	Written/ Viva voce	F & S	III	*Padarth vidnyan*
CO 1	Describe the physiology of *karmendriya*	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
	***Topic 14. Manas* (3 hr)** [Lecture: 2 hours, non-lecture: 1 hour]								
CO 1	Describe location and properties, functions and objects of *manas.*	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	

CO 7	Describe the physiology of *dhee, driti, smriti* and *manovaha srotas* along with the applied physiology of *unmada and apasmara*.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion Real life experience	Written/ Viva voce	F & S	III	*Kayachikitsa*
CO7	Decribe *kriyatmak* (physiological) importance of *manas*	Cognitive (Comprehension)	Dk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
	Topic 15. *Atma* (2 hr) [Lecture: 2 hours, non-lecture: 0 hours]								
CO 1	Describe properties and functions of *atma*.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S		
CO 7	Enumerate the difference between *paramatma* and *jivatma*, characteristic features of *atma* in living beings.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	*Padarth vidnyan*
CO 7	Explain characteristic features of *atma* in living beings.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO7	Decribe *kriyatmak* (physiological) importance of *atma*	Cognitive (Comprehension)	Dk	Kh	Lecture Discussion tutorials	Written/ Viva voce		III	
	Topic 16. *Nidra* & *Svapna* (2 hr) [Lecture: 2 hours, non-lecture: 0 hours]								
CO 1	Describe the process of *nidrotpatti*, classify *nidra.*	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Explain the physiological and clinical significance of *nidra.*	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Describe *svapnotpatti* and types of *svapna*.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Discuss about different types of *swapna* among your friends and try to understand ralation of *swapna* & *prakriti*.	Cognitive (Comprehension)	Nk	Kh	Group Discussion	Team assessment	TA	III	

	Part B (40 Hours) –								
	Topic 1. Physiology of Hemopoietic System (7 hr) [Lecture: 5 hours, non-lecture: 2 hours]								
CO 1	Describe the composition, functions of blood and blood cells.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	
CO 1	Stages and development of RBCs, WBCs, platelets.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	
CO 1	Describe the composition and functions of bone marrow	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	
CO 1	Describe the process of erythropoiesis and explain necessary facors for erythropoiesis.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	
CO 1	Describe the formation & destruction of RBCs	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	
CO 1	Describe the structure, types, synthesis and functions of haemoglobin along with abnormalities of Hb.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	
CO 1	Describe the types of WBCs	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	
CO 1	Describe the mechanism of hemostasis, (coagulation of blood) and blood clotting factors.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion Seminar	Written/ Viva voce	F & S	I	
CO 1	Describe the ABO & Rh system of blood group and explain the physiological basis of blood groups.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	Medical Physiology
CO 1	Explain the concept of erythroblastosis fetalis on the basis of Rh incompatibility.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion Seminar	Written/ Viva voce	F & S	I	
CO 1	Describe the classification and	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	

	functions of plasma proteins.								
CO 1	Describe the properties and hemostasis functions of platelets.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	
CO 1	Describe the physiological basis of manifestations of different blood disorders (anaemia, jaundice etc.)	Cognitive (Comprehension)	Dk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	
CO 1	Describe the functions of spleen.	Cognitive (Comprehension)	Dk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	
CO 1	Describe the functions of functions of lymph.	Cognitive (Comprehension)	Dk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	
	Topic 2. Immune System (2 hr) [Lecture: 2 hours, non-lecture: 0 hours]								
CO 1	Describe classification of immunity (Innate, acquired and artificial),	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	
CO 1	Describe the different mechanisms involved in immunity: Humoral (B-cell mediated) and T-Cell mediated immunity.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	
CO 1	Distinguish between the passive immunization and active immunization	Cognitive (Comprehension)	Dk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	
CO 1	Describe the applied physiology of immunity: Immunodeficiency diseases, Hypersensitivity reactions, Auto-immune diseases etc.	Cognitive (Comprehension)	Dk	Kh	Lecture Discussion Seminar	Written/ Viva voce	F & S	I	
	Topic 3. Cardiovascular Physiology (7 hr) [Lecture: 5 hours, non-lecture: 2 hours]								
CO 1	Describe the mechanical and electrical properties	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	

	of heart muscles, describe different phases of the Cardiac cycle.								
CO 1	Describe the physiological and clinical significance of heart sounds.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	
CO 1	Describe the physiology of regulation of cardiac output and venous return.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	
CO 1	Describe the physiological basis of ECG.	Cognitive (Comprehension)	Dk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	
CO 1	Describe the regulation of heart-rate and arterial pulse,	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	
CO 1	Define and describe the regulation of systemic arterial blood pressure	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	
CO 1	Describe the physiology of fetal circulation.	Cognitive (Comprehension)	Dk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	
CO 1	Define and describe the regulation of systemic arterial blood pressure	Cognitive (Comprehension)	Dk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	
CO 1	Describe the history of the discovery of blood circulation	Cognitive (Comprehension)	Nk	Kh	Online	Self assessment	SA	I	
	Topic 4. Muscle physiology (2 hr) [Lecture: 2 hours, non-lecture: 0 hours]								
CO 1	Compare and contrast the functions and properties of skeletal muscles, cardiac muscles and smooth muscles.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	II	
CO 1	Describe the physiology of muscle contraction of all types of muscles.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	II	
	Topic 5. Skin, Adipose Tissue and circulating Lipids (3 hr) [Lecture: 2 hours, non-lecture: 1 hour]								
CO 1	Describe the functions of the skin, sweat glands, sebaceous glands and subcutaneous tissue	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	II	

CO 1	Describe the functions of Adipose Tissue including adipokines	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	II	
CO 1	Describe the process of formation & metabolism of lipoproteins like VLDL, LDL and HDL and that of triglycerides.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	II	
CO 1	Describe the functional anatomy and physiology of the male reproductive system	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	II	
CO 1	Describe the physiology of regulation of spermatogenesis, functions of testosterone and male sexual act	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	II	
CO 1	Describe physiology of the female reproductive system including oogenesis, ovulation and hormonal regulation of the menstrual cycle	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	II	
CO 1	Describe the functions of placenta	Cognitive (Comprehension)	Dk	Kh	Lecture Discussion	Written/ Viva voce	F & S	II	
CO 1	Describe the physiology of lactation	Cognitive (Comprehension)	Dk	Kh	Lecture Discussion	Written/ Viva voce	F & S	II	
CO 1	Describe the applied physiology of the reproductive system of male and female infertility.	Cognitive (Comprehension)	Nk	Kh	Lecture Discussion	Written/ Viva voce	F & S	II	
	Topic 7. Renal Physiology (6 hr) [Lecture: 4 hours, non-lecture: 2 hours]								
CO 1	Describe the functional anatomy of kidney.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Describe the functions of kidney, ureters and bladder.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Describe stages of the mechanism of urine formation.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion Semiar	Written/ Viva voce	F & S	III	

CO 1	Describe control of micturition.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Describe the role of Juxta glomerular apparatus in regulation of blood pressure and pH of body fluids.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	Medical Physiology
CO 1	Describe the applied physiology of the urinary system (urolithiasis, acute and chronic renal failure etc).	Cognitive (Comprehension)	Dk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Describe the physiology of special senses.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Describe the visual process and visual pathway	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Describe the mechanism of hearing and auditory pathway	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Describe the taste, smell and skin sensation	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Describe the physiology of sleep and dreams	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	

List of Practicals

PRACTICALS (Marks-100)				
	List of Topics	**Term**	**Lecture**	**Non-Lecture**
1	Dhatu sararata parikshana	**I**	0	10
2.	Demonstrate laboratory equipment (spotting)	**I**	0	1
3.	Demonstrate blood collection	**I**	0	1
4.	Estimate haemoglobin	**I**	0	2
5.	Estimate bleeding time & clotting time	**I**	0	2
6.	Estimate blood grouping	**I**	0	2
7.	Prakriti parikshana	**II**	0	20
8.	Dosha vriddhi kshaya parikshana	**II**	0	4
9.	Dhatu vriddhi kshaya parikshana	**II**	0	5
10.	Nadi parikshana	**II**	0	3
11.	Pulse examination	**II**	0	2
12.	WBC estimation	**II**	0	2
13.	RBC estimation	**II**	0	2
14.	DLC estimation	**II**	0	2
15.	Measurement of Blood pressure	**II**	0	2
16.	Perform the procedure Inspection of respiratory system	**II**	0	2
17.	Perform the procedure Inspection of heart sound	**II**	0	3
18.	Agni parikshana	**III**	0	6
19.	Koshtha parikshana	**III**	0	2
20.	Urine examination	**III**	0	2
21.	Demonstrate ESR, PCV	**III**	0	1
22.	Observe the procedure of ECG	**III**	0	2
23.	Perform the procedure of examining the cranial nerves and reflexes	**III**	0	2

Table 4: Learning objectives (Practical) of AyUG- KS

A4 Course outcome	B4 Learning Objective (At the end of the session, the Students should be able to)	C4 Domain/ sub	D4 Must to know/ desirable to know/Nice to know	E4 Level Does/ Shows how/ Knows how/ Know	F4 T-L method	G4 Assessment	H4 Formative /summative	I4 Term	J4 Integration
	AyUG – KS Practical (100 marks) (Total 200 Hr)								
	Practical (100 marks) =(Kriya Sharir 50 + Physiology 30 + Non Lecture practical activities 20)								
	***1. Assessment of prakriti parikshana* (20 classes)** [Lecture: 0 hours, non-lecture: 20 hours]								
CO 3	Describe the procedure of *prakriti parikshan* of CCRAS portal.	Cognitive	Mk	Kh	Lecture Demonstration Discussion Observe Tutorial	Practical Viva voce	F & S	II	
CO 3	Demonstrate *prakriti parikshan* under the supervision of teacher.	Psychomotor	Mk	Sh	Demonstration in practical room & Bed side clinic Discussion	Viva voce	F & S	II	
CO 3	Determines *prakriti* of a paerson in an individual independently	Psychomotor	Mk	Dose	Demonstration in practical room & Bed side clinic Discussion Perform	Practical Viva voce Skill assessment OSPE, DOPS, CBD, Simulation	F & S	II	
CO 1	Recite verses of *vata, pitta & kapha prakriti*.	Cognitive (Recall Comprehension)	Dk	Kh	Discussion Recitation	Viva voce	F & S	II	
	***2. Assessment of dhatusarata parikshana* (10 classes)** [Lecture: 0 hours, non-lecture: 10 hours]								
CO 2	Describe the procedure of	Cognitive	Mk	Kh	Lecture Demonstration Discussion Observe	Practical Viva voce	F & S	I	

	dhatusarata parikshana								
CO 2	Demonstrate *dhatusarata parikshana* under the supervision of the teacher.	Psychomotor	Mk	Sh	Demonstration in practical room & Bed side clinic Discussion Assist	Viva voce	F & S	I	
CO 2	Evaluates *dhatusarata* in an individual independently	Psychomotor	Mk	Dose	Demonstration Bed side clinic Discussion Perform	Practical Viva voce Skill assessment OSPE, DOPS, CBD, Simulation	F & S	I	
CO 1	Recite verses of *ashta dhatusarata*.	Cognitive (Recall & Comprehension)	Dk	Kh	Discussion Recitation	Viva voce	F & S	I	
	***3. Assessment of agni parikshana* (6 classes)** [Lecture: 0 hours, non-lecture: 6 hours]								
CO 2	Discribe the procedure of *agni parikshana*	Cognitive/ comprehension	Mk	Kh	Lecture Demonstration Discussion Observe	Practical Viva voce	F & S	III	
CO 2	Demonstrate *agni parikshana* under the supervision of the teacher.	Psychomotor	Mk	Sh	Demonstration Bed side clinic Discussion Assist	Viva voce	F & S	III	
CO 2	Analyse *agni* in an individual independently	Psychomotor	Mk	Dose	Demonstration Bed side clinic Discussion Perform	Practical Viva voce Skill assessment OSPE	F & S	III	
CO 1	Recite verses of *agni*.	Cognitive (Recall & Comprehension)	Dk	Kh	Discussion Recitation	Viva voce	F & S	III	
	***4. Assessment of koshtha parikshana* (2 classes)** [Lecture: 0 hours, non-lecture: 2 hours]								
CO 2	Discuss the procedure of *koshtha parikshana*	Cognitive	Mk	Kh	Lecture Demonstration Discussion Observe	Practical Viva voce	F & S	III	
CO 2	Demonstrate *koshtha parikshana* under the	Psychomotor	Mk	Sh	Demonstration Bed side clinic Discussion	Viva voce	F & S	III	

	supervision of the teacher.				Assist				
CO 2	Evaluate *koshtha* of an individual independently	Psychomotor	Mk	Dose	Demonstration Bed side clinic Discussion rform	Practical Viva voce Skill assessment OSPE	F & S	III	

	***5. Assessment of dosha vrddhi kshaya lakshana* (4 classes)** [Lecture: 0 hours, non-lecture: 4 hours]								
CO 3	Discuss the procedure of *dosha vrddhi kshaya lakshana*	Cognitive	Mk	Kh	Lecture Demonstration Discussion Observe	Practical Viva voce	F & S	II	
CO 3	Demonstrate *dosha vrddhi kshaya parikshana* under the supervision of the teacher.	Psychomotor	Mk	Sh	Demonstration Bed side clinic Discussion Assist	Viva voce	F & S	II	
CO 3	Perform *dosha vrddhi kshaya parikshana* in an individual independently	Psychomotor	Mk	Dose	Demonstration Bed side clinic Discussion Perform	Practical Viva voce Skill assessment OSPE	F & S	II	
CO 1	Recite verses of *dosha vrddhi kshaya.*	Cognitive (Recall Comprehension)	Dk	Kh	Discussion Recitation	Viva voce	F & S	II	
	***6. Assessment of dhatu vrddhi kshaya parikshana* (5 classes)** [Lecture: 0 hours, non-lecture: 5 hours]								
CO 3	Describe the procedure of *dhatu vrddhi kshaya lakshana*	Cognitive	Mk	Kh	Lecture Demonstration Discussion Observe	Practical Viva voce	F & S	II	
CO 3	Demonstrate *dhatu vrddhi kshaya parikshan* under the supervision of the teacher.	Psychomotor	Mk	Sh	Demonstration Bed side clinic Discussion Assist	Viva voce	F & S	II	
CO 3	Perform *dhatu vrddhi kshaya parikshan* in an individual independently	Psychomotor	Mk	Dose	Demonstration Bed side clinic Discussion Perform	Practical Viva voce Skill assessment OSPE	F & S	II	
CO 1	Recite verses of	Cognitive	Dk	Kh	Discussion	Viva voce	F & S	II	

	dhatu vrddhi kshaya.	(Recall & Comprehe nsion)			Recitation				

	7. Assessment of nadi parikshana **(3 classes)** [Lecture: 0 hours, non-lecture: 3 hours]								
CO 5	Describe the procedure of *nadi parikshana*	Cognitive	Mk	Kh	Lecture Demonstration Discussion Observation Tutorial	Practical Viva voce	F & S	II	
CO 5	Demonstrate *nadi parikshana* under the supervision of the teacher.	Psychomotor	Mk	Sh	Demonstration Bed side clinic Discussion Assist	Viva voce	F & S	II	
CO 5	Find out recent advances in nadi pariksha	Cognitive	Mk	Kh	Lecture Demonstration Discussion Observe	Practical Viva voce OSPE	F & S	II	
	Part B 30 practical of 2 hr each								
	[Lecture: 0 hours, non-lecture: 30 hours]								
CO 4	Explain the general laboratory etiquette demonstrate the use of laboratory equipment.	Cognitive Psychomotor	Mk	Sh	Lecture Demonstration Discussion Observe	Practical Viva voce Skill assessment OSPE	F & S	I	
CO 4	Discuss procedure of collection of a blood sample – prick, venepuncture method, use of anticoagulants.	Cognitive	Mk	Kh	Lecture Demonstration Discussion Assist	Viva voce	F & S	I	
CO 4	Describe Observe procedure of haemoglobin estimation, bleeding time and clotting time, blood grouping and Rh typing,	Cognitive	Mk	Kh	Lecture Demonstration Discussion Assist	Viva voce	F & S	I	

	differential Leukocyte Counting procedure.								
CO 4	Evaluate Hb, Bleeding time, clotting time, blood grouping & Rh typing, sebveral Leukocyte Count (independently).	Psychomotor	Mk	Sh	Lecture Demonstration Discussion Perform	Practical Viva voce Skill assessment OSPE	F & S	I	
CO 4	Describe the procedure of WBC counting, RBC counting.	Cognitive	Mk	Kh	Lecture Demonstration Discussion Assist	Viva voce	F & S	II	
CO 4	Count WBC, RBC (independentl y).	Psychomotor	Mk	D	Perform	Practical	F	II	
CO 4	Discribe the procedure of ESR, PCV	Cognitive	Mk	Sh	Lecture Demonstration Discussion Assist	Viva voce	F	III	
CO 4	Describe the procedure of physical and chemical examination of urine.	Cognitive	Mk	Kh	Lecture Demonstration Discussion Assist	Viva voce	F & S	III	
CO 4	Identify physical and chemical properties of urine.	Psychomotor	Dk	Sh	Lecture Demonstration Discussion Assist	Practical Viva voce Skill assessment OSPE, DOPS	F & S	III	
CO 4	Discuss the procedure of pulse examination demonstrated.	Cognitive	Mk	Kh	Lecture Demonstration Discussion Assist	Viva voce	F & S	II	
CO 4	Examine pulse independently.	Psychomotor	Mk	Sh	Lecture Demonstration Discussion Perform	Practical Viva voce Skill assessment OSPE	F & S	II	
CO 4	Describe the procedure of measurement of blood pressure	Cognitive	Mk	Kh	Lecture Demonstration Discussion Assist	Viva voce	F & S	II	

CO 4	Measure blood pressure (independently).	Psychomotor	Mk	Sh	Lecture Demonstration Discussion Perform	Practical Viva voce Skill assessment OSPE	F & S	II	
CO 4	Discuss the procedure of inspection of CVS and assessment of heart sounds	Cognitive	Mk	Kh	Lecture Demonstration Discussion Assist	Viva voce	F & S	II	
CO 4	Illustrate inspection of CVS and assessment of heart sounds (independently).	Psychomotor	Mk	Sh	Lecture Demonstration Discussion Perform	Practical Viva voce Skill assessment OSPE	F & S	II	
CO 4	Discuss the procedure of ECG recording demonstrated by the teacher.	Cognitive	Mk	Kh	Lecture Demonstration Discussion Assist	Viva voce Spotting	F & S	II	
CO 4	Discuss procedure of inspection of the respiratory system demonstrated by the teacher.	Cognitive	Mk	Kh	Lecture Demonstration Discussion Assist	Viva voce	F & S	II	
CO 4	Examine of the respiratory system (independently).	Psychomotor	Mk	Sh	Lecture Demonstration Discussion Perform	Practical Viva voce Skill assessment OSPE	F & S	II	
CO 4	Discuss the procedure of examining the cranial nerves and reflexes (superficial/ deep /visceral) demonstrated by the teacher.	Cognitive	Mk	Kh	Lecture Demonstration Discussion Assist	Viva voce Skill assessment OSPE	F & S	III	
CO 4	Perform the procedure of examining the cranial nerves and	Psychomotor	Mk	Sh	Lecture Demonstration Discussion Perform	Practical Viva voce Skill assessment OSPE	F & S	III	

	reflexes (superficial/deep/ visceral) by students independently.								

Table 5: Non-Lecture Activities Course AyUG- KS

Theory Non Lecture 50 (Paper I -25 & Paper II-25)		**No of Activity hours**
1.	Assignment - homework based	3
2.	Brainstorming	2
3.	Buzz group	1
4.	Case based learning	1
5.	Confusion technique	1
6.	Debate	1
7.	Demonstration	2
8.	Direct observation skill (DOPS)	1
9.	Flipped classroom	1
10.	Group Discussion	3
11.	Jigsaw or puzzle	1
12.	Mnemonics	2
13.	Model based learning	1
14.	Online teaching aids	1
15.	Panel discussion	1
16.	Problem based learning	2
17.	Real-life experience	1
18.	Recitation	3
19.	Role Play	1
20.	Self directed learning	3
21.	Seminar by students	5
22.	Simulated condition	1
23.	Skill assessment	2
24.	Symposium	2
25.	Team project work	1
26.	Think-Pair-Share	2
27.	Tutorial	3
28.	Video show	2
Practical Non Lecture 100 (200 hours)		
1.	Ayurveda Practicals – 50	100
2.	Modern Practicals – 30	60
3.	Activity based learning – 20	40
	Communication Skills, Small project / Experiment designing, Task-based learning, Teamwork based learning, Team project, Problem Based Learning (PBL)/(CBL), Group Discussion, Workshops, Field visits, Preparation of charts 1, models and computerized simulation models etc. , Seminar presentations by students	
	Total Non Lecture hours	**250**

Additional Suggested topics for tutorials

Point No.	Name of Topic
T – 1 CO 6	*Atma lakshana*
T – 2 CO3	Characteristics of *Prakriti Eka doshaja, dwandwaja and sama prakriti. Clinical importance of deha prakriti, anukatva.*
T – 3 CO5	*Nadi vigyan*
T – 4 CO6	*Anukatva*
T – 5 CO6	*Indriya panch panchak and physiological study of panchajyanendriya and panchakarmendriya.*
T – 6 CO6	*Meanings of terminologies used for dhatu poshana nyaya related to dhatu poshana*
T – 7 CO1	*Ahara dravya vargikarana*
T – 8 CO1	*Avasthapaka & Vipak*

Suggested topics for seminar topics

Sr. No.	Content
S – 1 CO8	*Tridosha*
S – 2 CO8	*Agni*
S – 3 CO8	*Rasa rakta samvahan*
S – 4 CO8	*Pranavah srotas and shwasana prakriya*
S – 5 CO8	*Ashtavidh sara*
S – 6 CO8	*Trividh nyaya*
S – 7 CO8	*Prakriti*
S – 8 CO8	Basic concept of nervous system
S – 9 CO8	Rh Incompatibility
S – 10 CO8	Digesion of Carbohydrates, proteins & fats
S – 11 CO8	Blood clotting mechanism
S – 12 CO8	Immune system
S – 13 CO8	O_2-Co_2 gasious exchange
S – 14 CO8	Hormones
S – 15 CO8	Renal system

Suggested topics for group discussion

Sr. No.	Content
GD – 1 CO1	*Dosha dhatu mala mulam hi shariram*
GD – 2 CO1	*Concept of agni*
GD – 3 CO1	*Concept* of *upadhatu*
GD – 4 CO1	Role of *ranjak pitta in formation of rakta dhatu*
GD – 5 CO1	Concept of *srotas*
GD – 6 CO1	Physiology of *purishadhara kala / asthidhara kala. Pittadhara kala/ majjadhara kala*
GD – 7 CO1	Generation of *doshas*
GD – 8 CO1	*Ashraya-ashrayi bhava sambhadha of asthi and vata*
GD – 9 CO1	Process of *urine formation described in ayurveda compendia*
GD – 10 CO1	*Avasthapaka*
GD – 11 CO1	Concept of *shatkriyakala*
GD – 12 CO1	*Manas Prakriti*

Table 6: Assessment Summary

6 A- Number of papers and Marks Distribution

S.No.	Subject Code	Papers	Theory	Practical/Clinical Assessment					Grand Total
				Practical/ Clinical	Viva	Electives	IA	Sub Total	
1.	AyUG-KS	2	200	100	70	-	30	200	400

6 B - Scheme of Assessment (formative and Summative)

SR.NO.	PROFESSIONAL COURSE	DURATION OF PROFESSIONAL COURSE		
		First Term (1-6 Months)	Second Term (7-12 Months)	Third Term (13-18 Months)
1	First	3 PA & First TT	3 PA & Second TT	3 PA & UE

PA: Periodical Assessment; TT: Term Test; UE: University Examinations

6 C - Calculation Method for Internal assessment Marks (30 Marks)

TERM	PERIODICAL ASSESSMENT*					TERM TEST **	TERM ASSESSMENT	
	A	B	C	D	E	F	G	H
	1 (15 Marks)	2 (15 Marks)	3 (15 Marks)	Average (A+B+C/3)	Converted to 30 Marks (D/15*30)	Term Test (Marks converted to 30)	Sub Total _/60 Marks	Term Assessment (…./30)
FIRST							E+F	(E+F)/2
SECOND							E+F	(E+F)/2
THIRD						NIL		E
Final IA	Average of Three Term Assessment Marks as Shown in 'H' Column.							
	Maximum Marks in Parentheses *Select an Evaluation Method which is appropriate for the objectives of Topics from the Table 6 D for Periodic assessment. Conduct 15 marks assessment and enter marks in A, B, and C. ** Conduct Theory (100 Marks)(MCQ(20*1 Marks), SAQ(8*5), LAQ(4*10)) and Practical (100 Marks) Then convert to 30 marks.							

6 D - Evaluation Methods for Periodical Assessment

S. No.	Evaluation Methods for Periodical Assessment
1.	Practical / Clinical Performance
2.	Viva Voce, MCQs, MEQ (Modified Essay Questions/Structured Questions)
3.	Open Book Test (Problem Based)
4.	Summary Writing (Research Papers/ Samhitas)
5.	Class Presentations; Work Book Maintenance
6.	Problem Based Assignment
7.	Objective Structured Clinical Examination (OSCE), Objective Structured Practical Examination (OPSE), Mini Clinical Evaluation Exercise (Mini-CEX), Direct Observation of Procedures (DOP), Case Based Discussion (CBD)
8.	Extra-curricular Activities, (Social Work, Public Awareness, Surveillance Activities, Sports or Other Activities which may be decided by the department).
9.	Small Project
10.	Other activities explained in Table 3 Column G3 as per indicated term and objective of the top]ic.

6 E- Paper Layout

I PROFESSIONAL BAMS EXAMINATIONS

AyUG-KS

Paper-I

Time: 3 Hours Maximum Marks: 100

INSTRUCTIONS: All questions compulsory

TOTAL MARKS 100.

		Number of Questions	Marks per question	Total Marks
Q 1	Multiple Choice Questions (MCQ)	20	1	20
Q 2	Short answer questions (SAQ)	8	5	40
Q 3	Long answer questions (LAQ)	4	10	40
				100

AyUG-KS

Paper-II

Time: 3 Hours Maximum Marks: 100

INSTRUCTIONS: All questions compulsory

TOTAL MARKS 100.

		Number of Questions	Marks per question	Total Marks
Q 1	Multiple Choice Questions (MCQ)	20	1	20

Q 2	Short answer questions (SAQ)	8	5	40
Q 3	Long answer questions (LAQ)	4	10	40
				100

6 F- Disribution of Theory Exam

	Paper I **Part-A (Marks-60)**			**D** **Type of Questions** **"Yes" can be asked.** **"No" should not be asked.**		
	A **List of Topics AyUG-KS**	**B** **Term**	**C** **Marks**	**MCQ** **(1 Mark)**	**SAQ** **(5 Marks)**	**LAQ** **(10 Marks)**
1	**Sharir:**	**I**	8	Yes	Yes	No
2	**Basic principles of Ayurveda:**	**I**		Yes	Yes	No
3.	**Tridosha:**	**I**		Yes	Yes	No
4.	**Vata Dosha:**	**I**	26	Yes	Yes	Yes
5.	**Pitta Dosha:**	**I**		Yes	Yes	Yes
6.	**Kapha Dosha:**	**II**		Yes	Yes	Yes
7.	**Dosha Vriddhi-Kshaya:**	**II**		Yes	Yes	No
8.	**Kriyakala:**	**II**		Yes	Yes	No
9	**Prakriti:** **Deha- Prakriti:** **Manasa- Prakriti:**	**II**	26	Yes	Yes	Yes
10.	**Ahara**:	**III**		Yes	Yes	Yes
11.	**Agni**:	**III**		Yes	Yes	Yes
12.	**Aharapaka**	**III**		Yes	Yes	Yes
Part-B (Marks-40)						
1	**Physiology Homeostasis**:	**I**	23	Yes	Yes	Yes
2	**Physiology of Respiratory system**:	**II**		Yes	Yes	Yes
3	**Physiology of Gastrointestinal system**:	**II**		Yes	Yes	Yes
4	**Physiology of Nervous System**:	**III**	17	Yes	Yes	Yes
5	**Physiology of Endocrine glands**:	**III**		Yes	Yes	Yes

	Paper II PART-A (Marks-60)			**D** **Type of Questions** **"Yes" can be asked.** **"No" should not be asked.**		
	A **List of Topics AyUG-KS**	**B** **Term**	**C** **Marks**	**MCQ** **(1 Mark)**	**SAQ** **(5 Marks)**	**LAQ** **(10 Marks)**
Part-A (Marks-60)						
1	**Dhatu**:	**I**	18	Yes	Yes	No
2	**Rasa Dhatu**:	**I**		Yes	Yes	Yes
3.	**Rakta Dhatu**:.	**I**		Yes	Yes	Yes
4.	**Mamsa Dhatu**:	**I**		Yes	Yes	Yes
5.	**Meda Dhatu**:	**I**		Yes	Yes	Yes
6.	**Asthi Dhatu**:	**II**	19	Yes	Yes	Yes
7.	**Majja Dhatu** :	**II**		Yes	Yes	Yes
8.	**Shukra Dhatu:**	**II**		Yes	Yes	Yes
9	**Concept of Ashraya-Ashrayi bhava**	**II**		Yes	Yes	No
10.	**Ojas**:	**II**		Yes	Yes	Yes
11.	**Upadhatu**: **Stanya**: **Artava**: **Tvak**:	**II**	23	Yes	Yes	Yes
12.	**Mala**: **Purisha**: **Mutra**: **Sveda**: **Dhatumala**:	**III**		Yes	Yes	Yes
13	**Indriya vidnyan**:	**III**		Yes	Yes	Yes
14	**Manas**:	**III**		Yes	Yes	Yes
15	**Atma**:	**III**		Yes	Yes	No
16	**Nidra & Swapna**:	**III**		Yes	Yes	No
Part-B (Marks-40)						
1	**Haemopoetic system**:	**I**	18	Yes	Yes	Yes
2	**Immunity**:	**I**		Yes	Yes	No
3	**Physiology of cardio-vascular system**:	**I**		Yes	Yes	Yes
4	**Muscle physiology**:	**II**	07	Yes	Yes	No
5	**Adipose tissue**:	**II**		Yes	Yes	No
6	**Physiology of male and female reproductive**	**II**	15	Yes	Yes	Yes
7	**Physiology of Excretion**:	**III**		Yes	Yes	Yes
8	**Special Senses, Sleep and Dreams**:	**III**		Yes	Yes	Yes

6 G- Question paper blue print

Paper I

AyUG-KS		
A **Question Sr. No**	**B** **Type of Question**	**C** **Question Paper Format**
.Q1	**Multiple choice Questions (MCQ)** 20 Questions 1 mark each All compulsory Must know part - 15 MCQ Desirable to know - 3 MCQ Nice to know part - 2 MCQ	**MCQ no. Topic No** 1. Topic number part A 1 2. Topic number part A 2 3. Topic number part A 3 4. Topic number part A 4 5. Topic number part A 4 6. Topic number part A 5 7. Topic number part A 6 8. Topic number part A 7 9. Topic number part A 8 10. Topic number part A 9 11. Topic number part A 9 12. Topic number part A 10 13. Topic number part A 11 14. Topic number part A 12 15. Topic number part A 12 16. Topic number part B 1 17. Topic number part B 2 18. Topic number part B 3 19. Topic number part B 4 20. Topic number part B 5
Q2	**Short answer Questions (SAQ)** Eight Questions 5 Marks Each All compulsory Must know - 7 SAQ Desirable to know - 1 SAQ No questions on Kice to know	1. Topic no. Part A 1/ Topic no. Part A 2/ Topic no. Part A 3 2. Topic no. Part A 4/ Topic no. Part A 5/ Topic no. Part A 6 3. Topic no. Part A 7/Topic no. Part A 8 4. Topic no. Part A 9/Topic no. Part A 10 5. Topic no. Part A 11/ Topic no. Part A 12/ 6. Topic no. Part B 1/ Topic no. Part B 2/ 7. Topic no. Part B 3 8. Topic no. Part B 4/ Topic no. Part B 5
Q3	**Long answer Questions (LAQ)**	1. Topic no. Part A 4/ Topic no. Part A 5/ Topic no. Part A 6 2. Topic no. Part A 9/ Topic no. Part A 10/ Topic no. Part A 11/

	Four Questions 10 marks each All compulsory All questions on must know. No Questions on Nice to know and Desirable to know	Topic no. Part A 12 3. Topic no. Part B 1/ Topic no. Part B 2/ Topic no. Part B 3 4. Topic no. Part B 4/ Topic no. Part B 5

Paper II

AyUG-KS		
A **Question Sr. No**	**B** **Type of Question**	**C** **Question Paper Format**
.Q1	**Multiple choice Questions (MCQ)** 20 Questions 1 mark each All compulsory Must know part - 15 MCQ Desirable to know - 3 MCQ Nice to know part - 2 MCQ	**MCQ no. Topic no.** 1. Topic number part A 1/2 2. Topic number part A 3 3. Topic number part A 4/5 4. Topic number part A 6 5. Topic number part A 7 6. Topic number part A 8 7. Topic number part A 9/10 8. Topic number part A 11 9. Topic number part A 12 10. Topic number part A 13/14/15/16 11. Topic number part B 1 12. Topic number part B 2 13. Topic number part B 3 14. Topic number part B 4 15. Topic number part B 5 16. Topic number part B 6 17. Topic number part B 6 18. Topic number part B 7 19. Topic number part B 7 20. Topic number part B 8
Q2	**Short answer Questions (SAQ)** Eight Questions 5 Marks Each All compulsory Must know - 7	1. Topic no. Part A 1/ Topic no. Part A 2/ Topic no. Part A 3/ Topic no. Part A 4/ Topic no. Part A 5 2. Topic no. Part A 6/ Topic no. Part A 7/ Topic no. Part A 8/ Topic no. Part A 9/ Topic no. Part A 10 3. Topic no. Part A 11/ Topic no. Part A 12 4. Topic no. Part A 13/ Topic no. Part A 14/ Topic no. Part A 15

	Desirable to know - 1 SAQ No questiona on Nice to know	Topic no. Part A 16 5. Topic no. Part B 1/ Topic no. Part B 2/ Topic no. Part B 3/ 6. Topic no. Part B 4/ Topic no. Part B 5 7. Topic no. Part B 6/ Topic no. Part B 8 8. Topic no. Part B 7
Q3	**Long answer Questions (LAQ)** Four Questions 10 marks each All compulsory All questions on Must know. No Questions on Nice to know and Desirable to know	1. Topic no. Part A 2/ Topic no. Part A 3/ Topic no. Part A 4/ Topic no. Part A 5 2. Topic no. Part A 6/ Topic no. Part A 7/ Topic no. Part A 8/ Topic no. Part A 10 3. Topic no. Part A 11/ Topic no. Part A 12/ Topic no. Part A 13/ Topic no. Part A 14 4. Topic no. Part B 1/ Topic no. Part B 2/ Topic no. Part B 3

6 H Distribution of Practical Exam

(Practical 100 +Viva 70+ IA 30) = (Total 200 Marks)

	AyUG-KS		
SN	**Heads**	**Topic**	**Marks**
A	**Practical**		
1	**Spotting**	Spotting (including two problem-based test) 1. Histology slide 2. ECG report (counting heart rate etc.) 3. Blood report (normal-abnormal values and significance) 4. Photograph of prakriti character. 5. Problem based sara/agni parikshan. 6. Case of vrudhhi kshay lakshan. 7. Aplicability of one spot used in haematological practical. 8. Identify the difference between two things & use. 9. Model based 10. Human experiment related	10 Marks
2	**Ayu. Practical**	Performance based components. (Take only one practical separately OR make combination of few components of more than one practical) Ayurveda practical - Prakriti parikshana (Self / volunteer / patients)	40 Marks

		Sara parikshana Agni & koshtha *parikshana* Dosha vrddhi-kshaya lakshana/ Dhatu vriddhi -kshaya Lakshana	
3	**Lab. Practical**	Laboratory practical (Hb, BT, CT, Blood group, Urine exam) Human physiology practical (pulse examination, BP, heart sounds, reflexes)	30 Marks
4	**Project work**	Project work (Activity based)	10 Marks
5	**Practical Record**	Practical Record	10 Marks
		Total	**100 Marks**
B	**Viva Voce**	General viva voce based on Ayurveda (20), Viva on instruments (20), Structured viva on Part B (refer Table 2)(10), Recitation of verses (15), and Communication skill (5)	70 Marks
C	**IA**	Internal Assessment	30 Marks
		Total Marks	**200 Marks**

7. References / Resourses

• Ayurvediya Kriyasharir - Ranjit Rai Desai
• Kayachikitsa Parichaya - C. Dwarikanath
• Prakrit Agni Vigyan - C. Dwarikanath
• Sharir Kriya Vigyan - Shiv Charan Dhyani
• Abhinava Sharir Kriya Vigyana - Acharya Priyavrata Sharma
• Dosha Dhatu Mala Vigyana - Shankar Gangadhar Vaidya
• Prakrita Dosha Vigyana - Acharya Niranjana Dev
• Tridosha Vigyana - Shri Upendranath Das
• Sharira Tatva Darshana - Hirlekar Shastri
• Prakrita Agni Vigyana - Niranjana Dev
• Deha Dhatvagni Vigyana - Vd. Pt. Haridatt Shastri
• Sharir Kriya Vigyana (Part 1-2) - Acharya Purnchandra Jain
• Abhinava Sharir Kriya Vigyana - Dr. Shiv Kumar Gaur
• Pragyogik Kriya Sharir - Acharya P.C. Jain
• Kaya Chikitsa- Ramraksha Pathak
• Kaya Chikitsa Parichaya - Dr. C. Dwarkanath
• Concept of Agni - Vd. Bhagwan Das
• Purush Vichaya - Acharya V.J. Thakar
• Kriya Sharir - Prof. Yogesh Chandra Mishra
• Sharira Kriya Vijnana (Part 1 and 2) – Nandini Dhargalkar
• Sharir Kriya Vigyana - Prof. Jayaram Yadav & Dr. Sunil Verma.
• Kriya Sharir mcq – Dr. Kiran Tawalare
• Basic Principles of Kriya-Sharir (A treatise on Ayurvedic Physiology) - Dr. Srikant Kumar Panda
• Sharir Kriya – Part I & Part II – Dr. Ranade, Dr. Deshpande & Dr. Chobhe
• Human Physiology in Ayurveda - Dr Kishor Patwardhan
• Textbook of Physiology - Gyton & Hall
• Review of medical physiology – William Ganong
• Essentials of Medical Physiology - Sembulingam, K.
• Concise Medical Physiology - Chaudhari, Sujit. K.
• Fundamental of Anatomy & Physiology - Martini
• Principals of Anatomy & Physiology - Tortora & Grabowski
• Human Physiology - Richards, Pocock
• Samson Wrights Applied Physiology, Keele, Neil, joels
• Ayurveda Kriya Sharira - Yogesh Chandra Mishra
• Textbook of Medical Physiology - Indu Khurana
• Tridosha Theory - Subrahmanya Shastri
• Dosha Dhatu Mala vigyan – S. G. Vartak
• Purush Vichaya – Jayanad Thakar
• All Samhitas.
• Ayurvediya Shabda kosha.
• Vachaspatyam
• Shabdakalpadrum
• Monir Williams Sanskrit dictionary.

COURSE CURRICULUM FOR FIRST PROFESSIONAL BAMS
(PRESCRIBED BY NCISM)



RACHANA SHARIRA
(SUBJECT CODE- AyUG-RS)
HUMAN ANATOMY
(Applicable from 2021-22 batch onwards for 5 years or until further notification by NCISM, whichever is earlier)

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प्राणाभिसरः प्राणायतनानाम्

BOARD OF AYURVEDA
NATIONAL COMMISSION FOR INDIAN SYSTEM OF MEDICINE
NEW DELHI-110058

SCAN ME
Rachana

NCISM

I Professional Ayurvedacharya (BAMS)

Subject Code: AyUG-RS

Rachana Sharir

(Human Anatomy)

Summary

AyUG-RS Total number of Teaching hours: 500			
Lecture hours (LH) - Theory		**180 Hours**	**180 Hours (LH)**
Paper I	90 Hours		
Paper II	90 Hours		
Non-Lecture hours (NLH) – Theory		**80 Hours**	**320 Hours (NLH)**
Paper I	40 Hours		
Paper II	40 Hours		
Non-Lecture hours (NLH) - Practical		**240 Hours**	

AyUG-RS Examination (Papers & Mark Distribution)					
Item	**Theory Component Marks**	**Practical Component Marks**			
		Practical	**Viva**	**Elective**	**IA**
Paper I	**100**	**100**	**70**	**--**	**30**
Paper II	**100**				
Sub-Total	**200**	**200**			
Total marks	**400**				

Preamble

The primary purpose for teaching Rachana sharir to undergraduate students is to provide a thorough understanding of the basic principles of Sharir. Gross and microscopic structure and development of the human body in perspective of ancient and modern sciences, as well as to acquire necessary skills. Sharir in Ayurveda also provides in depth views to concepts like Marma and srotas. Learning of Sharir is most useful in further years in diagnosis and management of the diseases.

Various teaching and learning methods, including didactic, demonstration, tutorial, group discussion, seminars, Integrated Teaching (IT), Problem Based Learning (PBL), and Early Clinical Exposure (ECE), Case-Based Learning (CBL), Virtual Dissection, and cadaveric dissection, are used to transfer knowledge to students, and the syllabus is constructed accordingly. As a result, the students appreciate being a part of the teaching and learning process. This will help the students to become competent, self-assured, caring, and concerned humans capable of providing ethical medical treatment.

Index

Course Code and Name of Course 5
AyUG RS 5
Rachana Sharir (Human Anatomy) 5
Table 1- Course learning outcomes and matched PO. 5
Table 2: Contents of Course AyUG-RS 6
Paper I 6
Paper II AyUG-RS 8
Table 3: Learning objectives (Theory) of Course AyUG-RS 10
Paper I 10
Paper II 21
List of Practicals AyUG-RS 32
Table 4: Learning objectives (Practical) of AyUG- RS 34
Table 5: Non-Lecture Activities Course AyUG-RS 40
Table 6: Assessment Summary 40
6 A - Number of Papers and Marks Distribution 40
6 B - Scheme of Assessment (formative and Summative) AyUG-RS 40
6 C - Calculation Method for Internal assessment Marks (30 Marks) AyUG-RS 41
6 D - Evaluation Methods for Periodical Assessment 41
6 E - Paper Layout 42
PAPER-1 42
PAPER-1I 42
6 F – I - Distribution of Theory exam AyUG- RS 43
Paper I 43
Paper II 43
6 F – II - Theme table 44
Paper-I: 44
Paper-II 44
6 G Question paper Blue print for AyU-RS: 45
PAPER-I 45
PAPER-II 46
6 H - I - Distribution of Practical Exam 47
6 H - II Practical Spot examination 47
6 H - III Viva Voce 49
7. Reference and Resourses 49

Course Code and Name of Course

	Course code	Name of Course
	AyUG RS	**Rachana Sharir (Human Anatomy)**

AyUG RS

Table 1- Course learning outcomes and matched PO.

SR1 CO No	**A1 Course learning Outcome (CO) AyUG RS At the end of the course AyUG RS, the student should be able to-**	**B1 Course learning Outcome matched with program learning outcomes.**
CO1	Describe the fundamentals of Rachana Sharir, interpret and analyze it in relevant context and recognize its significance in Ayurveda	**PO1, PO2**
CO 2	Explain Garbha Sharir and Embryology in Ayurveda and modern science respectively with clinical significance	**PO1, PO2**
CO 3	Describe and demonstrate all the bones and joints with attachments of associated structures and its clinical application	**PO1, PO2**
CO 4	Explain the concept of Sira-Dhamani-Strotas, their organization in the human body and its applied aspect	**PO1, PO2**
CO 5	Identify the Marmas and understand its classification along with its importance in preventive and therapeutic aspect	**PO1, PO2**
CO 6	Explain and demonstrate the gross anatomy of the organs of various systems and their applied anatomy in perspective of Ayurveda and Modern science	**PO1, PO2, PO3**
CO 7	Explain the Indriya Sharir and Sensory organs with its application in preventive and therapeutic domain.	**PO1, PO2**
CO 8	Identify and locate all the structures of body and mark the topography of the living Sharir.	**PO1, PO3**
CO 9	Respect the cadaver and perform dissection with commitment to reiterate the theoretical aspect of Ayurved Rachana Sharir and contemporary sciences.	**PO1, PO3, PO5**
CO 10	Describe the basic principles of imaging technologies and identify the anatomical structures in the radiograph	**PO1, PO2, PO3**

Table 2: Contents of Course AyUG-RS

Paper I					
SN	**A2** **List of Topics AyUG-RS**	**B2** **Term**	**C2** **Marks**	**D2** **Lecture hours**	**E2** **Non-Lecture hours**
1	**Shariropkramaniya Shaarira** • Sharir and Shaarir vyakhya (definitions of sharira and sharira) • Shadangatvam (Six regions of the body) • Anga Pratyanga vibhaga (subdivisions) • Sharir shastra vibhag • Sharir gyan prayojan and its description in contemporary science with its clinical importance	**I**	6	4	2
2	**Paribhasha Shaarira** • Kurcha, Kandara, Jala, Asthisamghata, Seemnta, Seevani, Rajju, and lasika • Terminologies related shadang sharir	**I**	4	3	1
3.	**Garbha Shaarira** • Garbha Vyakhya (Definition of Garbha) • Concept of Shukra and Artava • Garbhavkranti. Masanumasik grabhavruddhi • Role of panchamahabhoot in Garbhavruddhi • Concept of Beeja, Beejabhaga, Beejabhagavayava • Garbhposhana • Apara nirmiti, Garbhanabhinadi • Garbha Angapratyanga utpatti according to different Acharya • Garbha Vikruti	**I**	15	17	5
4.	**Asthi Shaarira** Enumeration of Asthi, Types, asthi swaroopa, with its applied aspect	**I**	4	2	1
5.	**Sandhi Shaarira** • Description of Sandhi and its enumeration, • Types of Sandhi with its clinical importance • Introduction of diseases of Sandhi explained in Ayurveda	**II**	4	2	3
6.	**Snayu sharir** Concept of Snayu and its clinical importance	**II**	3	2	1
7.	**Peshi Shaarira** • Description of Peshi, • Utpatti, types, Swaroop, function with its importance	**II**	3	2	1
8.	**Kesha, Danta, Nakha Sharir** • Description of Panchbhautik swaroop and its applied value • Explanation of its swabhava (Pitruja) and its applied value • Description of Prakrita (normal) and Vikruta(abnormal) Swaroop (appearance) of kesha, danta, nakha in concern with disease • Importance of examination of kesha, danta, nakha	**II**	4	2	1

	as diagnostic tool				
9	**Embryology** • Definitions and branches of embryology. • Embryo and Fetus. Sperm and Ovum, Fertilization, Cleavage. • Germ layers formation and their derivatives. • Laws of heredity, Sex determination and differentiation, Month-wise development of embryo. • Fetal circulation, Placenta formation, Umbilical cord formation	**I**	5	7	2
10	**Osteology** • Bone: structure, types and ossification. • Description of each bone with clinical anatomy	**I**	12	9	6
11	**Arthrology** • Joints: structure, types and movements. • Description of joints of extremities, inter-vertebral joints and temporomandibular joint with their clinical anatomy.	**II**	10	10	6
12	**Myology** • Structure and types of muscles. Description of important muscles: origin, insertion, actions, nerve supply and clinical anatomy. • Muscle movements in Yogasana	**II**	4	6	2
13	**Nervous System** • Nervous system: Introduction and classification • Meninges • Description of Brain and Spinal cord. • Description of Peripheral Nervous System: Cranial and Spinal nerves, Brachial, Cervical, Lumber and Sacral nerve plexus, • Anatomical consideration of Autonomic Nervous System, • Formation and circulation of cerebrospinal fluid • Blood supply of Brain and Spinal cord.	**III**	14	14	4
14	**Endocrinology** • Description of endocrine glands (Pituitary, Thyroid, Parathyroid, Thymus, Pineal and Suprarenal glands) with clinical aspects. • Histology of all glands.	**III**	8	8	3
15	**Lymphatic system** • Introduction Structure included in lymphatic system: Lymph vessels, Lymph nodes, Lymph glands with their clinical importance.	**III**	4	2	2

Paper II AyUG-RS					
SN	**A2** **List of Topics AyUG-RS**	**B2** **Term**	**C2** **Marks**	**D2** **Lecture hours**	**E2** **Non-Lecture hours**
1	**Pramana Sharira:** Anguli pramana & Anjali praman with its applied importance	**II**	2	2	1
2	**Koshtha Evam Ashaya Sharira** • Definition of Kostha with its applied importance and • Enumeration of Koshthanga and its description • Concept of Ashaya with its clinical importance	**I**	4	2	1
3.	**Sira Sharir** • Concept of Sira • Nirukti, types, enumeration of Sira and its applied aspect • Introduction to Sira vedha	**II**	4	3	1
4.	**Dhamani Sharir** • Concept of Dhamani • Nirukti, types, enumeration of Dhamani and its applied aspect	**II**	2	2	1
5.	**Strotas Shaarira** • Concept of Strotas • Nirukti, types, number of Srotas, Strotomool and its applied aspect • Types of Strotas and its description. • Applied aspect of Strotas	**II**	7	8	3
6.	**Kala Shaarira** • Definition and etymology of Kala • Enumeration and description of Kala • Applied aspect of Kala	**III**	4	2	2
7.	**Indriya Shaarira** • Definition of Indriya, Indriya artha and Indriya adhisthan, • Number and importance of Indriya • Description of Gyanendriya, Karmendriya and Ubhayendriya (Manas). • Ayurved sharir of Indriya adhistan- Karna, Twacha, Netra, Jivha, Nasa • Applied aspect of Indriya	**III**	3	3	1
8.	**Twacha Sharir** Definition, types and characteristics of Twacha with its clinical importance, significance of Twacha adhisthana in disease manifestation, its relation with Dhatu.	**III**	3	2	2
9	**Marma Sharira** • Marma: definition, enumeration, classification, location • Surface demarcation of Marma • Explanation of Trimarma	**II**	15	13	4

	• Detail description of Marma with its applied importance.				
10	**Respiratory System** • Bronchial tree and Lungs with their clinical aspects. • Respiratory tract: Nasal cavity, Pharynx, Larynx, Trachea • Pleura with its clinical aspects • Diaphragm and its opening • Histology of all organs	**II**	10	6	4
11	**Digestive system** • Regions of abdomen • Organs of digestive tract (alimentary tract) with their clinical aspects. • Digestive glands: Liver, Spleen and Pancreas. • Description of peritoneum with its clinical aspects • Histology of all organs	**I**	12	10	6
12	**Cardiovascular system** • Description of Heart • Structure of artery & vein • Importance blood vessels with their course and branches. • Pericardium with applied aspect • Histology of Heart	**II**	8	8	3
13	**Urinary System** • Urinary tract: Kidney, Ureter, Urinary Bladder and Urethra with their clinical aspects • Histology of all organs	**II**	10	8	3
14	**Reproductive system** • Male Reproductive system: Reproductive organs, Scrotum and glands (Testis, Prostate and Seminal vesicles) with their clinical aspects. • Female reproductive system: Introduction of external genital organ in brief and internal reproductive organs in detail, tract and glands with clinical importance. • Histology of all organs	**III**	6	7	3
15	**Sensory organs** Description of structures of Eye, Ear, Nose, Tongue and Skin with their clinical aspects.	**III**	10	14	5

Table 3: Learning objectives (Theory) of Course AyUG-RS

Paper I RACHANA SHARIR –									
A3 Course outcome	B3 Learning Objective (At the end of the session, the students should be able to)	C3 Domain/ sub	D3 Must to know/ desirable to know/Nice to know	E3 Level Does/ Shows how/ Knows how/ Know	F3 T-L method	G3 Assessment	H3 Formative /summative	I3 Term	J3 Integration
Topic 1- Shariroupkramaniya [Time: Lecture: 04 hours, non-lecture 02 hours] Practical- 02 hours									
CO1	Define Sharir.	Cognitive / Recall	MK	Knows	Lecture	Written / viva-voce/ Open book test	F&S	I	
CO1	Describe the constitutional elements of Sharir	Cognitive/ Comprehension	MK	Knows	Lecture	Written/ viva-voce	F&S	I	
CO1	Analyze the Constitutional hierarchy of Sharir and its relevance	Cognitive/ analyze	DK	Knows how	Lecture/ GD	Written / viva-voce	F&S	I	
CO1	Enlist Anga -Pratyanga and specific terms for each Pratyanga	Cognitive/ Recall	MK	Knows	Lecture/ GD	Written/ viva-voce	F&S	I	
CO1	Describe the Importance of Pratyaksha (Demonstration & Dissection) method of learning Sharir	Cognitive - comprehension	MK	Knows how	Lecture/ demonstration/ TT/ GD	Written / viva-voce	F&S	I	
CO1	Explain the Mruta Samshodhana as mentioned	Cognitive / Comprehension	MK	Knows	Demonstration/ simulation/	Written / viva-voce	F&S	I	

	in Sushruta Samhita and as per the modern science.	Psychomotor							
CO1	Appraise the concept of body donation and its relevance in present scenario	Cognitive - analysis, Affective	NK	Knows	Lecture/ educational video/ SDL	Written / viva-voce	F&S	I	
Topic 2- Paribhasha Sharir [Time: Lecture: 03 hours, non-lecture 01 hours] Practical- 6 hours									
CO1	Explain the terms Kandara, Kurcha, Mamsa, Rajju, Sevani, Jala, Seemant, Asthi Sanghat in context to its enumeration, site and structure.	Cognitive / comprehension	MK	Knows	Lecture/ Demonstration	Written/ viva-voce/ Open book test	F&S	I	
CO1	Evaluate the clinical importance of Kandara, Kurcha, Mamsa, Rajju, Sevani, Jala Seemant, Asthi and Samghat	Cognitive/ Application	DK	Knows how	Lecture/ Demonstration/ SDL	Written/ viva-voce	S	I	
Topic 3- Garbha Sharir [Time: Lecture: 17 hours, non-lecture 05 hours]									
CO 2	Define Garbha and recall the related verse from samhitas.	Cognitive / knowledge	MK	Knows	Lecture/ Recitation	Written/ viva-voce	F & S	I	-
CO 2	Explain the concept of Shukra and recall the related verse from samhitas.	Cognitive / comprehension	MK	Knows	Lecture/ Recitation	Written/ viva-voce	F & S	I	-
CO 2	Explain the concept of Artava and recall the related verse from samhitas.	Cognitive / comprehension	MK	Knows	Lecture/ recitation	Written/ viva-voce	F & S	I	-
CO 2	Describe the role of tridosha and panchamahabhuta in the fetal development	Cognitive / comprehension	MK	Knows how	Lecture/ IT	Written/ viva-voce	F & S	I	Dept. of Streerog Prasuti tantra
CO 2	Explain the concept of Beeja, Beejbhaag, Beejabhagavayava	Cognitive / Comprehension	MK	Knows	Lecture/ GD/ TT	Written/ viva-voce	F & S	I	Dept. of Streerog Prasuti tantra

CO 2	Describe Masanumasik Garbha vriddhi kram and recall the related verse from samhitas.	Cognitive / comprehension	MK	Knows how	Lecture/ Recitation/ demonstration with 3D animated video	Written/ viva-voce/ Open book test	F & S	I	-
CO 2	Describe Garbhaposhana	Cognitive / comprehension	MK	Knows how	Lecture	Written/ viva-voce/ Open book test	F & S	I	-
CO 2	Describe the formation of Apara according to Ayurved	Cognitive / knowledge	MK	Knows, Knows how	Lecture/ demonstration with 3D animated video	Written/ viva-voce/ Open book test	F & S	I	-
CO 2	Describe Garbha nabhinadi	Cognitive / knowledge	MK	Knows	Lecture	Written/ viva-voce	F & S	I	-
CO 2	Explain Angapratyanga utpatti with the related verse from samhitas.	Cognitive / comprehension	MK	Knows how	Lecture/ demonstration with 3D animated video/	Written/ viva-voce/ Assignments/ Open book test	F & S	I	Dept. of Streerog Prasuti tantra
Topic 4- Asthi Shaarira [Time: Lecture: 02 hours, non-lecture 01 hours]									
CO1	Enlist the number of Asthi according to different Acharyas	Cognitive/ Recall	MK	Knows how	Lecture	Written / viva-voce/ Open book test	F & S	I	
CO1	Describe the Asthi Sanghata and Asthi Simanta	Cognitive/ comprehension	MK	Knows	Lecture/ Demonstration	Written / viva-voce	F & S	I	
Topic 5- Sandhi Sharir [Time: Lecture: 02 hours, non-lecture 03 hours]									
CO 3	Define the term Sandhi	Cognitive – Recall	MK	Knows	Lecture	Written/ viva-voce	F&S	II	
CO 3	Classify Sandhi into different types.	Cognitive – Recall	MK	Knows	Lecture	Written/ viva-voce/ project work	F&S	II	
CO 3	Demonstrate the movements of Chala Sandhi and	Cognitive – Application	MK	shows	Lecture +	Written/ viva-voce	F&S	II	

	comprehend the structural appearance	Psychomotor			Demonstration thorugh model/ simulation				
CO 3	Illustrate the applied aspect of Sandhi and introduction of diseases of Sandhi explained in Ayurveda	Cognitive - Application	DK	Knows how	Lecture/ ECE/ SDL/ Seminar	Written/ viva-voce/ Assignment	F&S	II	Kayachi kitsa
Topic 6- Snayu Sharir [Time: Lecture: 02 hours, non-lecture 01 hours]									
CO 6	Describe Snayu with respect to its definition, structure, types, number, importance with its clinical importance	Cognitive/ comprehensi on	MK	Knows how	Lecture with demonstration/ SDL/Seminar	Written/ Viva -voce/ Open book test	F&S	II	
Topic 7- Peshi Sharir [Time: Lecture: 02 hours, non-lecture 01 hours]									
CO 5	Describe Peshi Sharir and its classification as per Ayurveda	Cognitive – comprehensi on	MK	Knows	Lecture/ Demonstration/ SDL/ Seminar	Written/ Viva-voce/ Open book test	F&S	II	
Topic 8- Kesha, Danta, Nakha Sharir [Time: Lecture: 02 hours, non-lecture 01 hours]									
CO 6	Describe Panchabhautik Swaroop, Swabhav (Pitruja) with its applied value in Prakriti and also explain related diseases with importance of examination kesha, danta, nakha as diagnostic tool	Cognitive/ comprehensi on	MK	Knows how	Lecture with demonstration with 3D animated video/ SDL	Written/ Viva -voce/ Open book test/ Assignment	F&S	II	
Topic 9- Embryology [Time: Lecture: 07 hours, non-lecture 02 hours]									
CO 2	Define embryology and enlist its branches	Cognitive / knowledge / recall	DK	Knows	Lecture	Written/ viva-voce	F & S	I	
CO 2	Define Embryo and Foetus	Cognitive / knowledge / recall	MK	Knows	Lecture	Written/ viva-voce	F & S	I	

CO 2	Describe the anatomical structure of Sperm and Ovum and explain its clinical importance	Cognitive / comprehension	MK	Knows how	Lecture/ Demonstration	Written/ viva-voce/ Assignment	F & S	I	
CO 2	Define term of fertilization	Cognitive / knowledge / recall	MK	Knows	Lecture/ Seminar	Written/ viva-voce	F & S	I	
CO 2	Describe the process of cleavage	Cognitive / comprehension	MK	Knows how	Lecture/ Educational 3D Animated videos	Written/ viva-voce	F & S	I	--
CO 2	Explain the process of germ layer formation and its derivatives	Cognitive / comprehension	MK	Knows how	Lecture/ Educational 3D Animated videos	Written/ viva-voce	F & S	I	Dept. of Streerog Prasuti tantra
CO 2	Explain the laws of heredity	Cognitive / comprehension	MK	Knows how	Lecture/ Seminar	Written/ viva-voce	F & S	I	Dept. of Streerog Prasuti tantra
CO 2	Describe the process of sex determination and differentiation	Cognitive / comprehension	NK	Knows how	Lecture/ Seminar	Written/ viva-voce	F & S	I	--
CO 2	Explain the month wise development of Foetus	Cognitive / comprehension	MK	Knows how	Lecture/ Demonstration	Written/ viva-voce/ Open book test/ Project work	F & S	I	Dept. of Streerog Prasuti tan
CO 2	Explain foetal circulation and the changes in the circulation after birth	Cognitive / comprehension	MK	Knows how	Lecture/Demonstration	Written/ viva-voce	F & S	I	--
CO 2	Describe Placenta formation & its structure with applied anatomy	Cognitive / application	MK	Knows how	Lecture/ Seminar/ ECE	Written/ viva-voce	F & S	I	Dept. of Streerog Prasuti tantra
CO 2	Describe Umbilical cord with clinical importance	Cognitive / knowledge / application	MK	Knows how	Lecture/ Seminar/ ECE	Written/ viva-voce	F & S	I	Dept. of Streerog Prasuti tantra

Topic 10- Osteology [Time: Lecture: 09 hours, non-lecture 06 hours] Practical- 20 hours									
CO3	Explain skeleton and its importance	Cognitive/ comprehension	MK	knows	Lecture/ Demonstration/ Seminar	Written / viva-voce	F & S	I	
CO3	Describe the uses of bones	Cognitive/ comprehension	MK	Knows	Lecture	Written / viva-voce	F & S	I	
CO3	Describe and demonstrate the processes and depressions of various bones	Cognitive/ comprehension, Application	MK	Show how	Lecture / Demonstration	Written / viva-voce	F & S	I	
CO3	Describe the characteristics of the bones	Cognitive/ comprehension	MK	Knows	Lecture	Written / viva-voce	F & S	I	
CO3	Describe the development and ossification of bones	Cognitive/ comprehension	DK	Knows how	Lecture	Written / viva-voce	F & S	I	
CO3	Describe and demonstrate Cranial bones and its applied anatomy	Cognitive / comprehension, Application	MK	Shows how	Lecture/ Demonstration	Written / viva-voce	F & S	I	
CO3	Describe and demonstrate Facial bones and its applied anatomy	Cognitive / comprehension, Application	DK	Shows how	Lecture/ Demonstration	Written / viva-voce	F & S	I	
CO3	Describe and demonstrate pelvic bones and its applied anatomy	Cognitive / comprehension, Application	MK	Shows how	Lecture/ Demonstration	Written / viva-voce	F & S	I	
CO3	Describe and demonstrate vertebral column and its applied anatomy	Cognitive / comprehension, Application	MK	Shows	Lecture/ Demonstration	Written / viva-voce	F & S	I	
CO3	Describe and demonstrate thorax bones and its applied anatomy	Cognitive / comprehensi	MK	Shows how	Lecture/ Demonstration	Written / viva-voce	F & S	I	

		on, Application							
CO3	Describe & demonstrate Clavicle and Scapula and its applied anatomy	Cognitive / comprehension, Application	MK	Shows how	Lecture/ Demonstration	Written / viva-voce	F & S	I	Kayachikitsa
CO3	Describe Phalanges, Carpal and Tarsal Bones and its applied anatomy	Cognitive / comprehension	DK	Knows	Lecture/ Demonstration	Written/ viva-voce	F & S	I	
CO3	Describe & demonstrate bones of the upper & lower extremity and its applied anatomy	Cognitive / comprehension, Application	MK	Shows how	Lecture/ Demonstration	Written / viva-voce/ Project work	F & S	I	
CO3	Describe & demonstrate Patella and its applied anatomy	Cognitive / comprehension, Application	DK	Shows	Lecture/ Demonstration	Written / viva-voce	F & S	I	
CO10	Recognize and describe the Radiological structures in radiograph	Cognitive / comprehension, Application	MK	Shows	Lecture/ Demonstration/ PBL/ ECE/ SDL	Written / viva-voce/ Project work/ Assignment	F & S	I	
Topic 11- Arthrology [Time: Lecture: 10 hours, non-lecture 06 hours] Practical- 8 hours									
CO 3	Recall the classification of Joints	Cognitive – Recall	MK	Knows	Lecture	Written/ viva-voce	F&S	II	
CO 3	Demonstrate movements of Synovial Joints and comprehend the structural aspect helping in movements.	Cognitive – Application Psychomotor	MK	Knows how	Lecture/ Demonstration/ Simulation	Written/ viva-voce	F&S	II	
CO 3	Describe constitutional anatomy of joint	Cognitive – Comprehension	MK	Knows	Lecture	Written/ viva-voce	F&S	II	
CO 3	Describe joints of upper limb and lower limb region, TM joint, and its related applied aspect	Cognitive – Application	MK	Knows how	Lecture/ PBL/ ECE	Written/ viva-voce/ Open book test/ Assignment	F&S	II	Kaychikitsa

CO 3	Demonstrate the examination of synovial joints	Psychomotor	MK	Knows + Shows	Demonstration with case presentation in relative aspect/ ECE/ SDL/ 3D Animated videos	Written/ viva-voce/ Practical performance	F&S	II	Rognidan
Topic 12- Myology [Time: Lecture: 06 hours, non-lecture 02 hours] Practical- 8 hours									
CO5	State the types of muscles.	Cognitive – application Psychomotor	MK	Knows	Lecture	Written/ Viva-voce	F & S	II	
CO5	Describe and demonstrate the muscles of upper and lower extremity with their origin, insertion, action & nerve supply and applied aspect and its role in Yogasana	Cognitive – application	MK	Shows	Lecture/ Demonstration/ GD/TT/ SDL/ 3D Animated videos	Written/ Viva-voce/ Open book test/ Project work	F & S	II	Swasthvrit ta
CO5	Describe and demonstrate muscles of thorax and abdomen with their origin, insertion, action & nerve supply and applied aspect and its role in Yogasana	Psychomotor	MK	Shows	Lecture/ Demonstration/ GD/TT/ SDL/ 3D Animated videos	Written/ Viva-voce/ Open book test/ Project work	F & S	II	Swasthvrit ta
CO5	Describe and demonstrate muscles of back with origin, insertion, action & nerve supply and applied aspect and role in Yogasana	Cognitive – application	DK	Shows	Lecture/ Demonstration/ GD/TT/ SDL/3D Animated videos	Written/ Viva-voce/ Open book test/ Project work	F & S	II	Swasthvri tta
Topic 13- Nervous System [Time: Lecture: 14 hours, non-lecture 04 hours] Practical- 12 hours									
CO6	Explain the hierarchy of structural unit	Cognitive-/ comprehensi on	MK	Knows	Lecture/ Demonstration	Written/ viva-voce	F&S	III	
CO6	Describe the functional and structural division of the nervous system	Cognitive-comprehensi on	MK	Knows how	Lecture/ Seminar	Written/ viva-voce	F&S	III	

CO6	Explain the parts of Brain (Cerebrum, Cerebellum)	Cognitive – comprehension	MK	Knows, Knows how	Lecture/ Demonstration	Written/ viva-voce/ Open book test	F&S	III	
CO6	Describe external and internal features of Spinal cord.	Cognitive – comprehension	MK	Knows, Knows how	Lecture/ Demonstration/ 3D animated videos	Written/ viva-voce/ Open book test	F&S	III	
CO6	Illustrate the Blood supply of Brain and Spinal cord.	Cognitive – comprehension	MK	Knows, Knows how	Lecture/ Demonstration/ 3D animated videos	Written/ viva-voce/ Open book test	F&S	III	
CO6	Describe the external features of diencephalon Mid brain, Pons, Medulla oblongata.	Cognitive-Comprehension	DK	Knows	Lecture/ Demonstration/ 3D animated videos	Written/ viva-voce/ Open book test	F&S	III	
CO6	Describe the limbic system	Cognitive-Comprehension	NK	Knows	Lecture/ Demonstration/ 3D animated videos	Written/ viva-voce/ Open book test	F&S	III	
CO6	Describe the general Sulci and gyri of cerebrum and determine the clinical importance of Broadman's classification	Cognitive – application	MK	Knows Knows how	Lecture/ Demonstration/ 3D animated videos	Written/ viva-voce/ Open book test	F&S	III	
CO6	Describe the ascending, descending pathways, upper motor neurons and lower motor neurons, its applied aspect in examination of nervous system	Cognitive/ application Affective /responding	DK	Knows how	Lecture/ Demonstration/ CBL, ECE	Written/ viva-voce/ Open book test	F&S	III	Kaya chikitsa
CO6	Demonstrate the superficial and deep reflexes and its clinical importance	Cognitive /application Psychomotor /perception Affective /responding	DK	shows	Lecture + Demonstration though living object/ ECE/ PBL/ SDL/ CBL	Viva-Voce/ Practical performance	F&S	III	Kayachi kitsa

CO6	Recall the general anatomical consideration of ANS	Cognitive/ Recall	MK	Knows	Lecture/ SDL	Written	F&S	III	
CO6	Describe the cranial and spinal nerves along with formation of nerve plexuses and applied anatomy	Cognitive / Application	DK	Knows how	Lecture/ PBL/ ECE/ SDL	Written / viva-voce/ Assignment	F &S	III	
CO6	Describe the Formation and circulation of cerebro- spinal fluid	Cognitive/ comprehensi on	MK	Knows how	Lecture	Written / viva-voce	F&S	III	
Topic 14- Endocrinology [Time: Lecture: 08 hours, non-lecture 03 hours] Practical- 02 hours									
CO 6	Define Endocrine Glands and enlist them	Cognitive/ Recall	MK	Knows	Lecture	Written / viva-voce	F & S	III	
CO 6	Describe Structure and Functions of Endocrine Glands	Cognitive-/ Comprehensi on	MK	Knows	Lecture	Written / viva-voce	F & S	III	
CO 6	State the location, Dimension & Shape of Pituitary	Cognitive/ Recall	MK	Knows	Lecture/ Demonstration	Written / viva-voce	F & S	III	
CO 6	Describe the Parts & subdivisions of Pituitary	Cognitive / comprehensi on	MK	Knows	Lecture/ Demonstration	Written / viva-voce	F & S	III	
CO 6	Describe the Blood Supply, Nerve Supply & Lymphatic drainage of Pituitary	Cognitive /comprehensi on	MK	Knows	Lecture/ Demonstration/ CBL	Written / viva-voce	F & S	III	
CO 6	Enlist the hormones secreted by Pituitary, & histology and discuss its clinical anatomy.	Cognitive/ Application	MK	Knows	Lecture/ Demonstration/ GD	Written / viva-voce/ Open book test	F & S	III	
CO 6	State the location, Dimension & Shape of Thyroid gland	Cognitive/Re call	MK	Knows	Lecture/ Demonstration	Written / viva-voce	F & S	III	
CO 6	Describe the lobes, border & surfaces of Thyroid gland with its relation.	Cognitive /comprehensi on	MK	Knows	Lecture/ Demonstration	Written / viva-voce	F & S	III	
CO 6	Describe the blood supply, nerve Supply & lymphatic drainage of Thyroid gland	Cognitive /comprehensi on	MK	Knows	Lecture/ Demonstration	Written / viva-voce	F & S	III	

CO 6	List the Hormones secreted by Thyroid gland and & histology, and discuss its clinical application	Cognitive - Application	MK	Knows	Lecture/ GD/ CBL	Written / viva-voce/ Open book test	F & S	III	
CO 6	Describe the location, Shape, Dimensions and structure of Parathyroid gland	Cognitive /comprehension	MK	Knows	Lecture/ Demonstration	Written / viva-voce	F & S	III	
CO 6	Describe the Blood Supply, Nerve Supply & Lymphatic drainage of Parathyroid gland	Cognitive /comprehension	DK	Knows	Lecture Demonstration	Written / viva-voce	F & S	III	
CO 6	List the hormones secreted by parathyroid, & histology and discuss its Clinical anatomy	Cognitive /Application	DK	Knows	Lecture/ GD/ CBL	Written / viva-voce/ Open book test	F & S	III	Kayachikitsa
CO 6	State the location, Shape & dimension of Suprarenal gland	Cognitive / Recall	MK	Knows	Lecture/ Demonstration	Written / viva-voce	F & S	III	
CO 6	Describe the Surface, Borders of Suprarenal gland along with its relation.	Cognitive/comprehension	MK	Knows	Lecture/ Demonstration	Written / viva-voce	F & S	III	
CO 6	List the Functions and Secretions of Suprarenal gland	Cognitive /Recall	MK	Knows	Lecture	Written / viva-voce	F & S	III	Sharir Kriya
CO 6	Describe the Blood Supply, Nerve Supply & Lymphatic drainage of Suprarenal gland	Cognitive /comprehension	DK	Knows	Lecture/ Demonstration	Written / viva-voce	F & S	III	
CO 6	Describe the Internal structure of suprarenal gland	Cognitive /comprehension	DK	Knows	Lecture/ Demonstration	Written / viva-voce	F & S	III	
CO 6	Write the Clinical & applied anatomy & histology of Suprarenal gland	Cognitive /application	DK	Knows	Lecture/ CBL	Written / viva-voce/ Open book test	F & S	III	Kayachikitsa
Topic 7- Lymphatic System [Time: Lecture: 02 hours, non-lecture 02 hours]									

CO 6	Define Lymphatic System	Cognitive / Recall	MK	Knows	Lecture	Written / viva-voce	F & S	III	
CO 6	Describe components of Lymphatic System	Cognitive / comprehension	MK	Knows	Lecture	Written / viva-voce	F & S	III	
CO 6	Describe the anatomical structure of Various Lymph Vessels i.e. Lymphatic Trunks, Thoracic Duct etc and explain its clinical importance	Cognitive / comprehension, Application	MK	Knows how	Lecture/ Demonstration/ CBL	Written / viva-voce	F & S	III	
CO 6	Describe the anatomical structure of Lymph Glands i.e. Lymph Nodes, Spleen, Thymus, Tonsils etc and explain its clinical importance	Cognitive / comprehension, Application	MK	Knows how	Lecture/ Demonstration/ ECE/ CBL	Written / viva-voce/ Open book test	F & S	III	Rognidan Evum Vikriti Vigyan
Paper II									
Topic 1- Praman sharir [Time: Lecture: 02 hours, non-lecture 01 hours]									
CO1	Describe Anguli and Anjali praman with its significance.	Cognitive Comprehension	MK	Knows	Lecture/ Demonstration/ GD	Written/ Viva-voce/ Open book test	F & S	II	
Topic 2- Koshtha Evam Ashaya Shaarira [Time: Lecture: 02 hours, non-lecture 01 hours]									
CO1	Define of Koshtha and Ashaya	Cognitive/ knowledge	MK	Knows	Lecture	Written/ viva-voce/ Open book test	F&S	I	
CO1	Describe the concept of various numbers of Koshthanga as per Samhitas	Cognitive/ Comprehensive	MK	Knows	Lecture	Written/ viva-voce/ Open book test	F&S	I	
CO1	Describe the concept of various Numbers of Ashaya as per Samhitas	Cognitive/ Comprehensive	MK	Knows	Lecture/ TT/ GD	Written/ viva-voce/	F&S	I	

						Open book test			
CO1	Describe and explain applied aspects of Koshtha and Ashaya.	Cognitive/ Comprehensive application	NK	Knows How	Lecture/ GD/ ECE	Written/ viva-voce/ Assignments/ Open book test	F&S	I	Kayackitsa
Topic 3- Sira sharir [Time: Lecture: 03 hours, non-lecture 01 hours]									
CO 4	Define Sira, Enumerate the sira & state its Nirukti	Cognitive /Recall	MK	Knows	Lecture/ Seminar	Written / viva-voce/ Open book test	F & S	II	
CO 4	Explain the classification of Sira	Cognitive / Comprehension	MK	Knows how	Lecture	Written / viva-voce/ Open book test	F & S	II	
CO 4	Define Vedhya Sira and Enumerate Vedhya Sira	Cognitive /Recall	MK	Knows	Lecture/ GD	viva-voce/ Open book test	F & S	II	
CO 4	Define Avedhya sira and Enumerate the Avedhya Sira	Cognitive / Recall	MK	Knows	Lecture	Written / viva-voce/ Open book test	F & S	II	
CO 4	Locate the Vedhya Sira in the body according to region	Cognitive / application Psychomotor	MK	Shows	Lecture/ Demonstration/ IT	viva-voce/ Practical performance	F & S	II	Shalyatantra
CO 4	Describe the applied aspect of Siravedha	Cognitive - application	DK	Knows how	Lecture/ ECE/ IT/ CBL	Written / viva-voce/ Assignment / Open book test	F & S	II	Shalyatantra
Topic 4- Dhamani Sharir [Time: Lecture: 02 hours, non-lecture 01 hours]									
CO 4	Define Dhamani, and state its Nirukti	Cognitive/ Recall	MK	Knows	Lecture/ Seminar	Written / viva-voce/ Open book test	F & S	II	

CO 4	Explain the classification of Dhamani	Cognitive/ Comprehension	MK	Knows how	Lecture/ Seminar	Written / viva-voce/ Open book test	F & S	II	
CO 4	Locate the Dhamani in the body according to region	Cognitive / application Psychomotor	DK	Shows	Lecture/ Demonstration	Viva-voce/ Practical performance	F & S	II	
Topic 5- Srotasa Sharir [Time: Lecture: 08 hours, non-lecture 03 hours]									
CO 4	Define Srotasa and state its Nirukti and types	Cognitive/ Recall	MK	Knows	Lecture/ Seminar	Written / viva-voce/ Open book test	F & S	II	
CO 4	Explain the Classification of Srotasa	Cognitive / Comprehension	MK	Knows	Lecture/ Seminar	Written / viva-voce/ Open book test	F & S	II	
CO 4	State the Moolsthana of all Srotasa as per Acharya Sushrut and Charak and its clinical aspect	Cognitive / Recall	MK	Knows how	Lecture/ Seminar/ ECE	Written / viva-voce/ Assignment/ Open book test	F & S	II	Kayachikitsa/ Panchakarma
Topic 6- Kala Sharir [Time: Lecture:02 hours, non-lecture 02 hours] Practical- 03 hours									
CO1	Define Kala and explain the formation & functions of seven Kala	Cognitive –/ comprehension	MK	Knows	Lecture/ Seminar	Written / viva-voce/ Open book test	F&S	III	
CO1	Describe Saptakalas with its applied aspect	Cognitive /comprehension +application	MK	Knows	Lecture/ demonstration/ ECE	Written / viva-voce/ Open book test	F&S	III	Agadtantra
CO1	Relate the Sapta Kala with Sapta Dhatu	Cognitive – application + affective - awareness	NK	Knows how	Lecture/ Seminar/ IT	Written / viva-voce	F&S	III	
Topic 7- Indriya Sharir [Time: Lecture: 03 hours, non-lecture 01 hours]									

CO 7	Define Indriya. Interpret derivation of Indriya and explain its importance.	Cognitive / comprehension	MK	Knows	Lecture/ Seminar	Written / viva-voce/ Open book test	F & S	III	
CO 7	State the meaning of Indriya-artha and Indriya- adhishthan	Cognitive / knowledge	MK	Knows	Lecture/ Seminar	Written / viva-voce/ Open book test	F & S	III	
CO 7	Enlist Dnyanendriyas, Karmendriyas and Ubhayendriya	Cognitive / knowledge	MK	Knows	Lecture/ Seminar	Written / viva-voce/ Open book test	F & S	III	
CO 7	Illustrate classical description of Dnyanendriya Adhishthan – Karna, Twak, Netra, Jivha, Nasa with its clinical perspective	Cognitive / application	MK	Knows how	Lecture/ IT/ ECE/ PBL	Written / viva-voce/ Open book test/ Assignment	F & S	III	Dept. of Shalaky atantra
Topic 8- Twacha Sharir [Time: Lecture: 02 hours, non-lecture 02 hours]									
CO 7	DefineTwacha, its types and characteristics with its clinical importance, significance of twacha adhisthana in disease manifestation, its relation with dhatu	Cognitive/ comprehension	MK	Knows how	Lecture with demonstration with 3D animated video/ ECE/ SDL	Written/ Viva -voce/ Open book test	F&S	III	
Topic 9- Marma Sharir [Time: Lecture: 13 hours, non-lecture 04 hours] Practical- 12 hours									
CO 5	Define Marma and enumerate the Marmas	Cognitive – Recall	MK	Knows	Lecture/ Seminar	Written / viva-voce/ Open book test	F&S	II	
CO 5	Describe the Marma and Prana tatva with its Significance	Cognitive – Comprehension	MK	Knows	Lecture	Written / viva-voce/ Open book test	F&S	II	

CO 5	Discuss the classification of Marma	Cognitive – Comprehension	MK	Knows	Lecture/ ECE/ PBL	Written / viva-voce/ Open book test	F&S	II	
CO 5	Narrate the importance of marma in Sharir and Shalya vigyan	Cognitive – application	MK	Knows how	Lecture/ ECE/ PBL	Written/ Open book test	F&S	II	Shalyat antra
CO 5	Illustrate the specific location of Marma as per Sushruta Samhita	Cognitive – Comprehension	MK	Knows + Shows	Lecture/ Demonstration/ Workshop	Written / viva-voce/ Open book test	F&S	II	
CO 5	Demonstrate the Marma location as per modern anatomy	Cognitive – Application Psychomotor	MK	Knows + Shows	Lecture with 3D animated demonstration/ Seminar/ Workshop	Viva-voce/ Practical performance	F&S	II	Panchakarma
Topic 10- Respiratory system [Time: Lecture: 06 hours, non-lecture 04 hours] Practical- 10 hours									
CO6	Enlist the parts of the Bronchial tree	Cognitive / Recall	MK	Knows	Lecture/ Demonstration	Written / viva-voce	F & S	II	
CO6	State the location and dimension of Lungs	Cognitive - Knowledge	MK	Knows	Lecture/ Demonstration	Written / viva-voce	F & S	II	
CO6	Differentiate between Right and left Lungs	Cognitive -/ comprehension	MK	Knows	Lecture/ Demonstration	Written / viva-voce	F & S	II	
CO6	Describe the Borders, Surfaces and lobes of the Lungs	Cognitive/ comprehension	MK	Knows	Lecture/ Demonstration	Written / viva-voce/ Open book test	F & S	II	
CO6	Explain the root of Lungs	Cognitive /comprehension	MK	Knows	Lecture/ Demonstration	Written / viva-voce	F & S	II	
CO6	Explain the Bronchopulmonary segments of the lungs	Cognitive /comprehension	DK	Knows	Lecture/ Demonstration	Written / viva-voce	F & S	II	
CO6	Describe the Blood supply, Nerve supply, Lymphatics of the Lungs	Cognitive /comprehension	MK	Knows	Lecture/ Demonstration	Written / viva-voce	F & S	II	

CO6	Describe histology and Clinical Anatomy of Lungs	Cognitive / application	MK	Knows how	Lecture/ ECE/ PBL	Written / viva-voce/ Assignment	F & S	II	Kaychikita
CO6	State the extent and features of Trachea	Cognitive / Recall	MK	Knows	Lecture/ Demonstration	Written / viva-voce	F & S	II	
CO6	Explain the Relations of Trachea	Cognitive – /comprehension	MK	Knows how	Lecture/ Demonstration	Written / viva-voce/ Open book test	F & S	II	
CO6	Describe the Blood supply, Nerve supply and Lymphatics of Trachea	Cognitive /comprehension	MK	Knows how	Lecture/ Demonstration	Written / viva-voce	F & S	II	
CO6	Explain the histology and Clinical anatomy of Trachea	Cognitive /Application	MK	Knows how	Lecture/ ECE/ PBL	Written / viva-voce/ Assignment	F & S	II	Shalakyatantra
CO6	State the extent of Larynx and its external features	Cognitive / Recall	MK	Knows	Lecture/ Demonstration	Written / viva-voce	F & S	II	
CO6	Enlist the paired and unpaired cartilages of Larynx	Cognitive / Recall	MK	Knows	Lecture/ Demonstration	Written / viva-voce	F & S	II	
CO6	Explain the relations of Larynx	Cognitive /comprehension	DK	Knows how	Lecture/ Demonstration	Written / viva-voce/ Open book test	F & S	II	
CO6	Write the blood supply, nerve supply and lymphatics of Larynx	Cognitive /comprehension	DK	Knows	Lecture/ Demonstration	Written / viva-voce	F & S	II	
CO6	Explain the histology and clinical anatomy of Larynx	Cognitive / application	DK	Knows how	Lecture/ Demonstration	Written / viva-voce/ Assignment	F & S	II	
CO6	State the location of Pleura and enlist its parts	Cognitive/ Recall	MK	Knows	Lecture/ Demonstration	Written / viva-voce	F & S	II	
CO6	Describe the parts of parietal Pleura	Cognitive/ comprehension	MK	Knows	Lecture/ Demonstration	Written / viva-voce	F & S	II	
CO6	Explain the Pulmonary ligaments and recesses of Pleura	Cognitive /comprehension	MK	Knows	Lecture/ Demonstration	Written / viva-voce/	F & S	II	

						Open book test			
CO6	Describe the blood supply, nerve supply, lymphatics of Pleura	Cognitive /comprehension	DK	Knows how	Lecture	Written / viva-voce	F & S	II	
CO6	Explain the clinical anatomy of Pleura	Cognitive – Application	DK	Knows how	Lecture/ ECE/ PBL	Written / viva-voce/ Assignment	F & S	II	Kayachi kitsa
Topic 11- Digestive system [Time: Lecture: 10 hours, non-lecture 06 hours] Practical- 22 hours									
CO 6	Describe peritoneum and nine parts of abdomen	Cognitive – application	MK	Knows	Lecture/ Demonstration	Written/ Viva-voce/ Open book test/ Assignment	F & S	I	
CO 6	Describe the anatomy of the Oesophagus with relations, histology and clinical anatomy	Cognitive – application	MK	Knows	Lecture/ Demonstration	Written/ Viva-voce/ Open book test/ Assignment	F & S	I	
CO 6	Describe the structure of the Stomach, Stomach bed, the interior, histology, blood supply with relations and clinical anatomy	Cognitive – application	MK	Knows	Lecture/ Demonstration/ PBL/ ECE/ IT	Written/ Viva-voce/ Open book test/ Assignment	F & S	I	
CO 6	Describe the structure of the Duodenum with relations, histology and clinical anatomy.	Cognitive – application	MK	Knows	Lecture/ Demonstration/ ECE/ PBL/ IT	Written/ Viva-voce/ Open book test/ Assignment	F & S	I	
CO 6	Describe the parts, structure, histology and clinical anatomy of Large intestine.	Cognitive – application	MK	Knows how	Lecture/ Demonstration	Written/ Viva-voce/ Open book test/ Assignment	F & S	I	
CO 6	Describe the anatomy of the Rectum, Peritoneal &	Cognitive – application	MK	Knows how	Lecture/	Written/	F & S	I	

	visceral relations and applied anatomy of the Rectum.				Demonstration/ ECE/ PBL/ IT	Viva-voce/ Open book test/ Assignment			
CO 6	Describe the anatomy and musculature of the anal canal, histology with its blood supply, venous drainage and applied anatomy	Cognitive – application	MK	Knows how	Lecture/ Demonstration	Written/ Viva-voce/ Open book test/ Assignment	F & S	I	
CO 6	Describe the structure of the Pancreas, Pancreatic ducts, applied anatomy, along with histology of endocrine & exocrine part.	Cognitive – application	MK	Knows how	Lecture/ Demonstration/ ECE/ PBL/ IT	Written/ Viva-voce/ Open book test/ Assignment	F & S	I	
CO 6	Describe external features, anatomy histology and clinical anatomy of Liver	Cognitive – application	MK	Knows how	Lecture/ Demonstration/ ECE/ PBL/ IT	Written/ Viva-voce/ Open book test/ Assignment	F & S	I	
CO 6	Describe the structure, peritoneal & visceral relations histology and applied anatomy of the Spleen.	Cognitive – application	MK	Knows how	Lecture/ Demonstration/ ECE/ PBL/ IT	Written/ Viva-voce/ Open book test/ Assignment	F & S	I	
CO 6	Enlist the salivary glands and describe the anatomy of Parotid gland, Submandibular gland and Sublingual gland with its & Clinical anatomy	Cognitive – application	DK	Knows how	Lecture/ Demonstration	Written/ Viva-voce/ Open book test/ Assignment	F & S	I	
Topic 12- Cardiovascular System [Time: Lecture: 08 hours, non-lecture 03 hours]									
CO 6	Describe pericardium with its clinical anatomy	Cognitive – application	MK	Knows how	Lecture/ Demonstration	Written/ Viva-voce	F & S	II	
CO 6	Describe external features of the Heart.	Cognitive – recall	MK	Knows	Lecture/ Demonstration	Written/	F & S	II	

						Viva-voce/ Open book test/ Assignment			
CO 6	Describe internal features of the chambers, valve and auscultatory areas of Heart and its applied anatomy	Cognitive – application	MK	Knows how	Lecture/ Demonstration/ ECE/ PBL/ IT	Written/ Viva-voce/ Open book test/ Assignment	F & S	II	
CO 6	Describe the major arteries and veins of Heart.	Cognitive – Recall	MK	Knows	Lecture/ Demonstration	Written/ Viva-voce	F & S	II	
CO 6	Describe the histology and applied anatomy of Heart.	Cognitive – application	MK	Knows how	Lecture/ Demonstration/ ECE/ PBL/ IT	Written/ Viva-voce/ Open book test/ Assignment	F & S	II	
Topic 13- Urinary System [Time: Lecture: 08 hours, non-lecture 03 hours] Practical- 04 hours									
CO 6	Enlist the components of Urinary System	Cognitive / Recall	MK	Knows	Lecture	Written / viva-voce	F & S	II	
CO 6	Describe the anatomical structure of Kidney, Ureter, Urinary bladder, Urethra	Cognitive / Comprehension	MK	Knows	Lecture/ Demonstration	Written / viva-voce/ Open book test/ Assignment	F & S	II	Kayachikitsa /Panchkarma/Shalaya-Tantra
CO 6	Explain histology and clinical anatomy of Kidney, Ureter, Urinary bladder, Urethra and its importance	Cognitive / Comprehension & Application	MK	Knows how	Lecture/ Demonstration/ ECE/ PBL/ IT	Written / viva-voce/ Open book test/ Assignment	F & S	II	
CO 6	Enlist developmental anomalies of Kidney, Ureter, Urinary bladder, Urethra	Cognitive / Recall	NK	Knows	Lecture	Written / viva-voce/ Open book test/ Assignment	F & S	II	
Topic 14- Reproductive System [Time: Lecture: 07 hours, non-lecture 03 hours] Practical-02 hour									

CO 6	Enlist the anatomical structures of male reproductive system and discuss its Ayurved Sharir	Cognitive / Comprehension	MK	knows how	Lecture	Written / viva-voce/ Open book test	F & S	III	
CO 6	Describe the male reproductive organs – Testes, Scrotum, Epididymis, Ductus deference, Ejaculatory duct, penis, Spermatic cord with histology and applied aspect	Cognitive / application	MK	knows how	Lecture	Written / viva-voce/ Open book test	F & S	III	
CO 6	Enlist the anatomical structures of female reproductive system and discuss its Ayurved Sharir.	Cognitive / Comprehension	MK	knows how	Lecture/ Seminar	Written / viva-voce/ Open book test	F & S	III	
CO 6	Describe external female reproductive organs	Cognitive / Comprehension	MK	knows	Lecture/ Seminar	Written / viva-voce	F & S	III	
CO 6	Explain Internal reproductive organs in detail with histology and its applied anatomy (Uterus, Fallopian tube, Cervix, Vagina, Ovary)	Cognitive / application	MK	knows how	Lecture/ ECE/ PBL/ IT	Written / viva-voce/ Open book test/ Assignment	F & S	III	
CO 6	Explain histology of Uterus, Fallopian tube, Cervix, Vagina, Ovary	Cognitive / application	DK	knows how	Lecture/ Demonstration	Written / viva-voce/ Open book test/ Assignment	F & S	III	
Topic 15- Sensory organ [Time: Lecture: 14 hours, non-lecture 05 hours]									
CO7	Explain five sensory receptors, hierarchy of development of five senses and need of five senses	Cognitive - comprehension	MK	Knows how	Lecture with 3D animated demonstration	Written / viva-voce/ Open book test/ Assignment	F&S	III	
CO7	Describe structural aspect of five sensory organ	Cognitive – comprehension	MK	Knows	Lecture	Written / viva-voce/ Open book	F&S	III	

						test/ Assignment			
CO7	Describe the pathways of each sense in understanding of its functional anatomy	Cognitive - comprehension	NK	Knows how	Lecture with 3D animated demonstration/ ECE/ PBL/ IT	Written / viva-voce/ Open book test/ Assignment	F&S	III	
CO7	Determine Method of examination, tool of examination and Importance of sensory organ in systemic examination	Cognitive - comprehension + Psychomotor	DK	Knows + Shows	Lecture with practical demonstration of tools/ ECE/ PBL/ IT	Written / viva-voce/ Open book test/ Assignment	F&S	III	Shalakya dept. Kaya chikitsa dept

***MK-Must Know, DK- Desirable to Know, NK- Nice to Know, TT- Tutorial, GD- Group Discussion, PBL- Problem Based Learning, IT- Integrated Teaching, ECE- Early Clinical Exposure, SDL- Self Directed Learning, CBL- Case Base Learning (P)- Practical**

List of Practicals AyUG-RS

Marks: 200

Hours: 240

SN	Name of Practical	Term	Hours
P1	• Branches of anatomy. History of Anatomy • Ethics in dissection hall	I	2
P2	Anatomical Terminologies Anatomical position, Planes, and explanation of anatomical terms related to skin, fasciae, bones, joints and their movements, muscles, ligaments, tendons, blood vessels, nerves.	I	4
P3	Preservation methods of the cadaver, Mrut sharir Samshodhan • Different methods of preservation techniques. Brief introduction of chemical composition of preservative fluid.	I	2
P4	Introduction of Anatomy Act and Brief detailing about Bio medical waste management act 1960	I	2
P5	Shava vichhedana – detailed dissection of the whole body • Line of incision • Dissection technique • Identification of different tools and its Uses • Identification and characteristics of Different layers and its relation	I	32
	In Extremities: Dissection of extremities & Identification of related structures	II	40
	In Trunk region: Demonstration of visceral relation of thoracic, abdominal and pelvic organ	II	38
	In Head Region: Dissection of head, Identification of Meninges, Major Sulci and gyri, Superficial origin of Cranial Nerve and and venous Sinus.	III	14
	Dissection of sensory organs	III	22
P6	• Practical study of vital organs, Histological slides • Identification of external features of thoracic, abdominal and pelvic viscera	II	06
P7	Practical study of bones	I	36

	Identification of external features of bones and different attachment		
	Surface and Radiological anatomy **In Radiology Anatomy**: Characteristics of radio imaging film and detailing about its color contrasting Identification of Normal alignment of bodily structure – X ray film a. Chest X Ray – A.P And P.A view b. Detailing of A.P view of Shoulder joint, Elbow Joint, Wrist joint, Hip joint, knee joint, Ankle joint. c. Identification of basic clinical finding through X ray film related to long bones and joints	III	22
P8	**In Surface Anatomy Section:** • Identification of Underlying viscera of Nine region based upon Cadaveric and Living Anatomy • Surface marking of thoracic, abdominal and pelvic viscera	III	6
P9	Practical study of Marma Surface markings of all Marma points and its anatomical demarcation.	III	12
P10	Brief detailing about body donation, organ donation and its awareness (Communication skills)	III	2

***Note: one practical should not be less than 2 hrs.**

Table 4: Learning objectives (Practical) of AyUG- RS

A4 Course outcome	B4 Learning Objective (At the end of the session, the students should be able to)	C4 Domain/sub	D4 Must to know/ desirable to know/Nice to know	E4 Level Does/ Shows how/ Knows how/ Know	F4 T-L method	G4 Assessment	H4 Formative /summative	I4 Term	J4 Integration
Practical 1- Definition and branches of anatomy. History of Anatomy [Time: Practical or other activity - 02 hours]									
CO1	Define and describe branches of anatomy and its history	Cognitive / knowledge / recall	MK	Know	Lecture/ Tutorial	Written +viva-voce	F&S	I	
CO9	Practice of ethics in the context of human dissection	Cognitive / knowledge / recall/ Affective/ psychomotor	MK	Knows Shows	Tutorial/ Demonstration	viva-voce	F&S	I	
Practical 2- Anatomical Terminologies [Time: Practical- 2 hours and other activity 2 hours]									
CO1	Demonstrate anatomical position, Planes, and explanation of anatomical terms related to skin, fasciae, bones, joints and their movements, muscles, ligaments, tendons, blood vessels, nerves.	Cognitive / knowledge / recall	MK	Knows	Tutorial/ Demonstration/ Simulation	Written +viva-voce/ Open book test/ Assignments	F&S	I	

Practical 3- Preservation methods of the cadaver, Mrut sharir Samshodhan [Time: Practical or other activity - 02 hours]									
CO9	Describe and demonstrate preservation methods of the cadaver and Mrut sharir Samshodhan	Cognitive / knowledge / recall	MK	Knows, Shows	Tutorial/ Demonstration	Written +viva-voce	F&S	I	
CO9	Describe the different methods of preservation techniques and give brief introduction of chemical composition of preservative fluid.	Cognitive / knowledge / recall	MK	Knows	Tutorial/ Demonstration	Written +viva-voce, spotting, OSPE	F&S	I	
Practical 4- Introduction of Anatomy Act and Brief detailing about Bio medical waste management act 1960 [Time: Practical or other activity - 02 hours]									
CO9	Describe and follow the Anatomy Act and Bio medical waste management act 1960	Cognitive - comprehension, Affective/ psychomotor	NK	Knows, know how, Shows	Lecture/ Tutorial/ Demonstration	Written +viva-voce/ Practical performance/ Public awareness	F&S	I	
Practical 5- Shava vichhedana – detailed dissection of the whole body [Time: Practical- 126 hours and other activity 20 hours]									
CO9	Demonstrate the line of incision, dissection technique, different tools and their uses	Cognitive / knowledge / recall	MK	Knows/ Shows/ Shows How	Tutorial/ Demonstration / Cadaveric dissection	Written +viva-voce, spotting, OSPE	F&S	I	
CO9	Identify and characteristics of Different layers and its relation	Cognitive / knowledge / recall	DK	Knows	Tutorial/ Demonstration / Simulations /	Written +viva-voce, spotting, OSPE	F&S	I	

					Cadaveric dissection				
CO9	Identify and demonstrate muscles of extremities and its related structures	Cognitive / knowledge / recall	DK	Knows, Shows	Tutorial/ Demonstration / Cadaveric dissection	Written +viva-voce	F&S	II	
CO6	Describe and demonstrate the visceral relation of thoracic and abdominal organ	Cognitive - comprehension + psychomotor	DK	Knows, Shows	Demonstration / Simulations / Cadaveric dissection	Written +viva-voce, spotting, OSPE/ Practical performance	F&S	II	
CO6	Describe and demonstrate surface identification of parts of brain, major sulci and gyri, superficial origin of cranial nerve and meninges and venous sinus.	Cognitive - comprehension + psychomotor	MK	Knows, Shows	Demonstration / Simulations/ Cadaveric dissection	Written +viva-voce, spotting, OSPE/ Practical performance	F&S	III	
CO6	Describe, dissect and demonstrate the sensory organs	Cognitive - comprehension + psychomotor	MK	Knows, Shows	Demonstration / Simulations/ Cadaveric dissection	Written +viva-voce, spotting, OSPE/ Practical performance	F&S	III	
Practical 6- Practical study of vital organs, Histological slides and identification of external features of thoracic and abdominal viscera [Time: Practical- 04 hours and other activity 02 hours]									
CO6	Focus the histological slides of identified organs	Cognitive / knowledge / recall	DK	Knows	Tutorial/ Demonstration	Written +viva-voce spotting, OSPE	F&S	II	
CO6	Describe and demonstrate the	Cognitive - comprehension +	MK	Knows Shows	Demonstration	Written +viva-voce, spotting,	F&S	II	

	external features of thoracic and abdominal viscera	psychomotor				OSPE/ Practical performance			
Practical 7- Practical study of bones [Time: Practical- 30 hours or other activity 06 hours]									
CO3	Describe and demonstrate external features of bones and muscle attachments	Cognitive - comprehension + psychomotor	MK	Knows, Shows	Demonstration / Simulations	Written +viva-voce, spotting, OSPE/ Practical performance	F&S	I	
CO10	Describe the characteristics of radio imaging film and difference in color contrasting	Cognitive / knowledge / recall	DK	Knows	Tutorial/ Demonstration / Simulations	Written +viva-voce spotting, OSPE	F&S	I	
Practical 8- Surface and Radiological anatomy [Time: Practical- 20 hours and other activity 08 hours]									
CO10	Describe and demonstrate the normal alignment of chest X Ray – A.P And P.A view	Cognitive - comprehension + psychomotor	MK	Knows, Shows	Tutorial/ Demonstration	Written +viva-voce, spotting, OSPE/ Practical performance	F&S	III	
CO10	Describe and demonstrate the normal alignment of A.P view of Shoulder joint, Elbow Joint, Wrist joint, Hip joint, knee joint, Ankle joint	Cognitive - comprehension + psychomotor	MK	Knows, Shows	Tutorial/ Demonstration	Written +viva-voce, spotting, OSPE/ Practical performance	F&S	III	
CO10	Identify the basic clinical finding through X ray film	Cognitive - comprehension +	NK	Knows, Shows	Tutorial/ Demonstration	Written +viva-voce, spotting, OSPE/	F&S	III	Kaychikitas, Shalyatantra

	related to long bones and joints	Psychomotor				Practical performance			
CO8	Describe and demonstrate underlying viscera of Nine region based upon cadaveric and Living Anatomy	Cognitive - comprehension + psychomotor	DK	Knows, Shows	Tutorial/ Demonstration	Written +viva-voce, spotting, OSPE/ Practical performance	F&S	III	
CO8	Describe and demonstrate surface marking of thoracic and abdominal viscera	Cognitive - comprehension + psychomotor	DK	Knows, Shows	Tutorial/ Demonstration	Written +viva-voce, spotting, OSPE/ Practical performance	F&S	III	
Practical 9- Practical study of Marma [Time: Practical or other activity - 12 hours]									
CO5, CO8	Describe and demonstrate surface markings of Marma points and its anatomical demarcation of all Marma as per Shadang sharir	Cognitive - comprehension + psychomotor	MK	Knows + Shows	Tutorial/ Demonstration / Cadaveric dissection	Written +viva-voce, spotting, OSPE/ Practical performance	F&S	III	Panchakarma
Practical 10- Body donation, organ donation and its awareness [Time: Practical or other activity - 02 hours]									
CO9	Describe body donation and organ donation process with respect to specific organ and its awareness Demonstrate process of communication	Affective/ psychomotor Psychomotoe	DK MK	Knows, know how, Shows	Tutorial/ Demonstration Role Play	Written +viva-voce/ Public awareness/ social work	F&S	III III	Shalyatantra and Shalakyatantra

	process in awareness speech or cousellinf for Body donation.								

Table 5: Non-Lecture Activities Course AyUG-RS

1	List non lecture Teaching-Learning methods	No of Activities (Values in hours)
a	Seminar / Workshop	14
b	Tutorial (TT) / Group Discussion (GD)	14
c	Problem based learning (PBL)	8
d	Integrated teaching (IT)	8
e	Early Clinical Exposure (ECE)/ Case Base Learning (CBL)	18
f	Self-Directed Learning (SDL) / Summary writing	12
g	Field visit	6
		80
2	**Practical (refer Table 4)**	**240**
	Total	**320**

Other Educational Activities(Additional):

- Field visit (community/anatomy museum) - II & III term
- Practical journal – II & III term
- Summary/ Essay writing (Research papers/Samhitas literature review)- II or III term

Table 6: Assessment Summary

6 A - Number of Papers and Marks Distribution

S.No.	Subject Code	Papers	Theory	Practical/Clinical Assessment					Grand Total
				Practical/ Clinical	Viva	Electives	IA	Sub Total	
1.	**AyUG-RS**	2	200	100	70	-	30	200	400

6 B - Scheme of Assessment (formative and Summative) AyUG-RS

SR.NO.	PROFESSIONAL COURSE	DURATION OF PROFESSIONAL COURSE		
		First Term (1-6 Months)	Second Term (7-12 Months)	Third Term (13-18 Months)
1	First	3 PA & First TT	3 PA & Second TT	3 PA & UE

PA: Periodical Assessment; TT: Term Test; UE: University Examinations

6 C - Calculation Method for Internal assessment Marks (30 Marks) AyUG-RS

TERM	PERIODICAL ASSESSMENT*					TERM TEST**	TERM ASSESSMENT	
	A	B	C	D	E	F	G	H
	1 (15 Marks)	2 (15 Marks)	3 (15 Marks)	Average (A+B+C/3)	Converted to 30 Marks (D/15*30)	Term Test (Marks converted to 30)	Sub Total _/60 Marks	Term Assessment (…./30)
FIRST							E+F	(E+F)/2
SECOND							E+F	(E+F)/2
THIRD						NIL		E
Final IA	Average of Three Term Assessment Marks as Shown in 'H' Column.							
	Maximum Marks in Parentheses *Select an Evaluation Method which is appropriate for the objectives of Topics from the Table 6 D for Periodic assessment. Conduct 15 marks assessment and enter marks in A, B, and C. ** Conduct Theory (100 Marks) [MCQ (20*1 Marks), SAQ (8*5), LAQ (4*10)] and Practical (100 Marks) Then convert to 30 marks.							

6 D - Evaluation Methods for Periodical Assessment

S. No.	Evaluation Methods for Periodical Assessment
1.	Practical / Clinical Performance
2.	Viva Voce, MCQs, MEQ (Modified Essay Questions/Structured Questions)
3.	Open Book Test (Problem Based)
4.	Summary Writing (Research Papers/ Samhitas)
5.	Class Presentations; Work Book Maintenance
6.	Problem Based Assignment
7.	Objective Structured Clinical Examination (OSCE), Objective Structured Practical Examination (OPSE), Mini Clinical Evaluation Exercise (Mini-CEX), Direct Observation of Procedures (DOP), Case Based Discussion (CBD)
8.	Extra-curricular Activities, (Social Work, Public Awareness, Surveillance Activities, Sports or Other Activities which may be decided by the department).
9.	Small Project
10.	Other activities explained in Table 3 Column G3 as per indicated term and objective of the topic.

6 E - Paper Layout

I PROFESSIONAL BAMS EXAMINATIONS

AyUG-RS

PAPER-1

Time: 3 Hours Maximum Marks: 100

INSTRUCTIONS: All questions compulsory

TOTAL MARKS 100

		Number of Questions	**Marks per question**	**Total Marks**
Q 1	Multiple Choice Questions (MCQ)	20	1	20
Q 2	Short answer questions (SAQ)	8	5	40
Q 3	Long answer questions (LAQ)	4	10	40
				100

I PROFESSIONAL BAMS EXAMINATIONS

AyUG-RS

PAPER-1I

Time: 3 Hours Maximum Marks: 100

INSTRUCTIONS: All questions compulsory

TOTAL MARKS 100

		Number of Questions	**Marks per question**	**Total Marks**
Q 1	Multiple Choice Questions (MCQ)	20	1	20
Q 2	Short answer questions (SAQ)	8	5	40
Q 3	Long answer questions (LAQ)	4	10	40
				100

6 F – I - Distribution of Theory exam AyUG- RS

	Paper I				D Type of Questions "Yes" can be asked. "No" should not be asked.		
	A List of Topics		B Term	C Marks	MCQ (1 Mark)	SAQ (5 Marks)	LAQ (10 Marks)
1	Shariropkramaniya Shaarira		I	Refer Next table	Yes	Yes	No
2	Paribhasha Shaarira		I		Yes	Yes	No
3.	Garbha Shaarira		I		Yes	Yes	Yes
4.	Asthi Shaarira		I		Yes	Yes	Yes
5.	Sandhi Shaarira		II		Yes	Yes	Yes
6.	Snayu sharir		II		Yes	Yes	No
7.	Peshi Shaarira		II		Yes	Yes	No
8.	Kesha, Danta, Nakha Sharir		II		Yes	Yes	No
9	Embryology		I		Yes	Yes	Yes
10	Osteology		I		Yes	Yes	Yes
11	Arthrology.		II		Yes	Yes	Yes
12	Myology		II		Yes	Yes	No
13	Nervous System.		III		Yes	Yes	Yes
14	Endocrinology		III		Yes	Yes	Yes
15	Lymphatic system		III		Yes	No	Yes

	Paper II			D Type of Questions "Yes" can be asked. "No" should not be asked.		
	A List of Topics	B Term	C Marks	MCQ (1 Mark)	SAQ (5 Marks)	LAQ (10 Marks)
1	Pramana Shaarira:	II	Refer Next Table	Yes	No	No
2	Koshtha Evam Ashaya Shaarira	I		Yes	Yes	Yes
3.	Sira Sharir	II		Yes	Yes	Yes
4.	Dhamani Sharir	II		Yes	Yes	Yes
5.	Strotas Shaarira	II		Yes	Yes	Yes
6.	Kalaa Shaarira	III		Yes	Yes	Yes
7.	Indriya Shaarira	III		Yes	Yes	Yes
8.	Twacha Sharir	III		Yes	Yes	Yes
9	Marma Shaarira	II		Yes	Yes	Yes
10	Respiratory System	II		Yes	Yes	Yes

11	**Digestive system**	**I**		**Yes**	**Yes**	**Yes**
12	**Cardiovascular system**	**II**		**Yes**	**Yes**	**Yes**
13	**Urinary System**	**II**		**Yes**	**Yes**	**Yes**
14	**Reproductive system**	**III**		**Yes**	**Yes**	**Yes**
15	**Sensory organs**	**III**		**Yes**	**Yes**	**Yes**

6 F – II - Theme table

Paper-I:

Theme*	Topics	Term	Marks	MCQ	SAQ	LAQ
a	1) Shariropakramaniya 2) Paribhasha Sharir	I	10	YES	YES	NO
b	3) Garbha Sharir 9) Embryology	I	20	YES	YES	YES
c	4) Asthi Sharir 10) Osteology	I	16	YES	YES	YES
d	8) Kesh, Dant, Nakha Sharir 7) Peshi Sharir 12) Myology	II	11	YES	YES	NO
e	5) Sandhi Sharir 6) Shayu Sharir 11) Arthrology	II	17	YES	YES	YES
f	13) Nervous System	III	14	YES	YES	YES
g	14) Endocrinology 15) Lymphatic	III	12	YES	YES	YES
*Theme: is group of similar topics in Ayurved Sharir and Anatomy. Used in 6G question paper blue print						

Paper-II

Theme	Topics	Term	Marks	MCQ	SAQ	LAQ
a	2) Koshta Evam Ashay Sharir 11) Digestive system	I	16	YES	YES	YES
b	1) Praman Sharir 9) Marma Sharir	II	17	YES	YES	YES
c	3) Sira Sharir 4) Dhamani Sharir 5) Strotas Sharir 12) Cardiovascular System	II	21	YES	YES	YES
d	10) Respiratory System	II	10	YES	YES	YES
e	13) Urinary System	II	10	YES	YES	YES
f	14) Reproductive System	III	6	YES	YES	NO
g	6) Kala Shair 7) Indriya Sharir 8) Twacha Sharir 15) Sensory organs	III	20	YES	YES	YES

6 G Question paper Blue print for AyU-RS:
PAPER-I

A Question Sr. No	B Type of Question	C Question Paper Format **(Refer table 6 F II Theme table for themes)**
Q1	**Multiple choice Questions** **(MCQ)** 20 Questions 1 mark each All compulsory **Must know part: 15 MCQ** **Desirable to know: 3 MCQ.** **Nice to know: 2 MCQ**	1. Theme a 2. Theme a 3. Theme a 4. Theme a 5. Theme a 6. Theme b 7. Theme b 8. Theme b 9. Theme b 10. Theme b 11. Theme c 12. Theme d 13. Theme e 14. Theme e 15. Theme f 16. Theme f 17. Theme f 18. Theme f 19. Theme g 20. Theme g
Q2	**Short answer Questions** **(SAQ)** Eight Questions 5 Marks Each All compulsory **Must know part: 7 SAQ** **Desirable to know: 1 SAQ** **Nice to know: Nil**	1. Theme a 2. Theme b 3. Theme c 4. Theme d 5. Theme d 6. Theme e 7. Theme g/f 8. Theme g/f
Q3	**Long answer Questions** **(LAQ)** Four Questions 10 marks each All compulsory **All questions on must know** **No Questions on Nice to know and Desirable to know**	1. Theme b 2. Theme c 3. Theme e 4. Theme f/g

PAPER-II

Question Sr. No		**SET**
Q1	**Multiple choice Questions (MCQ)** 20 Questions 1 mark each All compulsory **Must know part: 15 MCQ** **Desirable to know: 3 MCQ.** **Nice to know: 2 MCQ**	1. Theme a 2. Theme b 3. Theme b 4. Theme c 5. Theme c 6. Theme c 7. Theme c 8. Theme c 9. Theme c 10. Theme d/e 11. Theme d/e 12. Theme d/e 13. Theme e/d 14. Theme e/d 15. Theme f 16. Theme g 17. Theme g 18. Theme g 19. Theme g 20. Theme g
Q2	**Short answer Questions (SAQ)** Eight Questions 5 Marks Each All compulsory **Must know part: 7 SAQ** **Desirable to know: 1 SAQ** **Nice to know: Nil**	1. Theme a 2. Theme b 3. Theme c 4. Theme d/e 5. Theme e/d 6. Theme e/d 7. Theme f 8. Theme g
Q3	**Long answer Questions (LAQ)** Four Questions 10 marks each All compulsory **All questions on Must to know** **No Questions on Nice to know and Desirable to know**	1. Theme a 2. Theme b 3. Theme c 4. Theme g

6 H - I - Distribution of Practical Exam

Practical 100 Marks + (Viva 70 + IA 30) Marks

SN	Heads	Marks
1	Spotting (Refer Table 6 H II below)	**20**
3	Kostha Ashay Sharir, Dissected organs and histology slides	**20**
4	Ashti, Sandhi, Peshi, Bones and Joints,	**20**
5	Marma Sharir, Surface & Radiological anatomy	**20**
6	Practical record (15 Marks) and Communication Skill (5 Marks)	**20**
7	Viva-Voce (Objective Structured) (Refer table 6 H – III)	**70**
8	Internal assessment	**30**
	Total Marks	**200**

6 H - II Practical Spot examination Questions – (20 marks)

SN	Question	Mark allotment
Topic- Garbha/Sira/Kala		
1	Identify the structure & give the Drushtant/ Metaphor related with it. e.g.- Gunja Phala- Artava, Spatik-Shukra, etc	Identification- 1 Drushtant- 1
Topic- Marma		
1	Identify the Marma & write its type as per Parinama & Rachana	Identification- 1 Type-1
2	Identify the Marma & write its Pariman & any two anatomical structures related to the Marma	Identification- 0.5 Pariman – 0.5 Anatomical structure - 1
3	Identify the Marma & write its applied aspect	Identification- 1 Viddha-1
Topic- Bones, Muscles		
1	Identify the bone & write its peculiarities (Any 2) e.g.- Atlas vertebra	Identification- 0.5 Peculiarities- 1.5
2	Identify the indicated part on the bone & write its attachment (Any 2) e.g., Scapula spine	Identification- 1 Attachment- 1
3	Identify the side of the given bone & write side determination points	Side identification- 0.5 Points- 1.5
4	Identify the side of the given bone & write its applied anatomy (Any 2 points)	Identification-1 Applied -1
5	Write the type of the given bone as per Ayurved & Modern science e.g., Tibia- Nalakasthi, long bone	Ayu. Type- 1 Modern type- 1
6	Identify the indicated muscle on the bone & write whether it originates or inserts there	Muscle identification- 1 Origin/insertion- 1
7	Identify the indicated muscle & write its action (Any 2)	Identification- 1 Action-1
8	Identify the indicated muscle& write its blood supply/nerve supply	Identification-1

		Supply-1
9	Identify the indicated muscle& write its applied anatomy	Identification-1 Applied -1
10	Identify the bone and write any two processes	Identification-1 Processes -1
11	Identify the bone and write any two angles	Identification-1 Angle -1
12	Identify the bone and write any one peculiarity related to gender e.g., Hip bone, Clavicle, Sacrum	Identification-1 Peculiarities- 1
Topic- Joints		
1	Identify the joint & write its ligaments (Any 3)	Identification- 0.5 Ligaments- 1.5
2	Identify the joint & write names of actions occurring there (Any 3)	Identification- 0.5 Actions- 1.5
3	Identify the joint & write the type of joint as per Ayurved & Modern science	Identification- 1 Ayu. Type- 0.5 Modern type- 0.5
4	Identify the joint & write its clinical anatomy (Any two)	Identification- 1 Clinical anatomy-1
5	Identify the joint & write its relation (Any two)	Identification- 1 Relation -1
6	Identify the joint & write the movements along with the muscle	Identification- 1 Movement -0.5 Muscle – 0.5
Topic- Organs		
1	Identify the organ & write name of the Srotas related to it	Identification- 1 Sroras-1
2	Identify the organ & write name of the kala related to it	Identification- 1 Kala-1
3	Identify the organ & write its Utpatti as per Ayurved	Identification- 1 Utpatti-1
4	Identify the organ & write its visceral impressions (Any 3)	Identification- 0.5 Impressions-1.5
5	Identify the organ & write its blood/nerve supply	Identification- 0.5 Supply-1.5
6	Identify the organ & write it's the borders (Any two)	Identification- 1 Borders -1
7	Identify the organ & write its surfaces (Any two)	Identification- 1 Borders -1
8	Identify the organ& write its applied anatomy (Any 3 points)	Identification-0.5 Applied -1.5
Topic- Radiology		
1	Identify the X-ray & write the structures seen in it (Any 3)	Identification- 0.5 Structures-1.5
2	Identify the view of the X-ray & write the marked structures (Any two)	Identification- 1 Structures-1
Topic- Central Nervous System/ Sense organs		
1	Name the lobes of the given organ e.g., cerebrum	Each lobe – 0.5 Total -2

2	Identify the sense organ & write its nerve supply e.g., tongue	Identification- 1 Supply-1
3	Identify the marked structure and write its applied aspect (Any two)	Identification- 1 Applied aspect-1

6 H - III Viva Voce (70 Marks)

Recall Questions	Comprehention Questions	Application Questions
40 Marks	20 Marks	10 Marks
1. Sira-Dhamani-Strotas 2. Shariropakramaniya Sharir 3. Paribhasha Shaarir 4. Praman Shaarira 5. Anatomical terminologies 6. Kalaa Sharir 7. Indriya Sharir & Sensory organ 8. Reproductive system	1. Nervous system 2. Endocrine system 3. Lymphatic system 4. Cardiovascular system 5. Urinary system	1. Garbha Sharir, 2. Embryology 3. Respiratory system 4. Digestive system
e.g., Definition, types, numbers, planes, parts, Shlokas, etc.	e.g., Relations, Blood supply, Nerve Supply, Venous & Lymphatic drainage, etc.	e.g., Applied anatomy, Clinical anatomy, Surgical anatomy, Congenital anomalies etc.

7. Reference and Resourses

1. Parishadhya Shabdarth Sharir
2. Pratyaksha sharirıram
3. Sharisthana of all Samhita
4. Sushrut Samhita Sharirshtana- Dr. Bhaskar Govind Ghanekar
5. Brihat Shariram Vaidyaratna- P.S. Varrier
6. Abhinava Shariram- Acharya Damodar Sharma Gaur
7. Manava Sharir (Revised Edition)- Prof. Dinkar Govind Thatte
8. Sharir Rachana Vigyan (English)- Vaidya P.G. Athawale
9. Manual of Practical Anatomy Cunnigham Practical Manual Vol-1, Vol-2, Vol-3
10. Clinical Anatomy in Ayurveda - Prof. D.G. Thatte & Prof. Suresh Chandra
11. Ayurvedic Human Anatomy - Prof. Dr. Giridhar M. Kanthi
12. Sharir Rachana Vigyan Vol I & II– Dr. Sunil Kumar Yadav
13. Regional Anatomy - B. D. Chaurasia
14. Rachana Sharir Vigyana - Dr. Mahendra Sing
15. Relevant chapters of Brihtrayee and Laghuthrayee
16. Gray's Anatomy
17. Text Book of Human Anatomy- Inderbir Singh
18. Clinical Anatomy- Richard S Snell
19. Fundamentals of Human Anatomy- Dr. Chakraborthy
20. Human Osteology - Poddar
21. A Handbook of Anatomical Terminology, Dr. Nidhi Shrivastava, Dr. Ravi Kumar Shrivastava, Dr. Rakesh Kumar Sharma.

COURSE CURRICULUM FOR FIRST PROFESSIONAL BAMS
(PRESCRIBED BY NCISM)



SAMHITA ADHYAYAN-1
(SUBJECT CODE- AyUG-SA1)

STUDY OF AYURVEDA CLASSICAL TEXT

(Applicable from 2021-22 batch onwards for 5 years or until further notification by NCISM, whichever is earlier)

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प्राणाभिसरः प्राणायतनानाम्

BOARD OF AYURVEDA
NATIONAL COMMISSION FOR INDIAN SYSTEM OF MEDICINE
NEW DELHI-110058

SCAN ME

Samhita

NCISM

I professional Ayurvedacharya (BAMS)

Subject Code: AyUG-SA1

Samhita Adhyayan 1

Summary

Total number of Teaching : 400			
Lecture (LH) - Theory		**140**	**140 (LH)**
Paper I	140		
Non-Lecture (NLH) – Theory		**260**	**260 (NLH)**
Paper I	260		

Examination (Papers & Mark Distribution)					
Item	**Theory Component Marks**	**Practical Component Marks**			
		Practical	**Viva**	**Elective**	**IA**
Paper I	**100**	**--**	**75**	**10 (Set-FC)**	**15**
Sub-Total	**100**	**100**			
Total marks	**200**				

PREFACE

The main purpose of Samhita teaching is to enable the students to read, understand and practice the Samhitas. Samhita is nothing but an ancient Practical Manual of Ayurveda. Samhita teaching and learning process need to be practically oriented for a better understanding of the subject. It is the need of time to make some addition in the current teaching and learning process of Samhita to make it more relevant, practical, and contemporary. New teaching technology tools will certainly be helpful in the effective delivery of knowledge of Samhita. As per the revised regulation, the nomenclature of the subject is **Samhita Adhyayana-I**.

The subject includes Ashtanga Hridayam Sutrasthana 1 to 15 chapters and Charaka Samhita Sutrasthana 1 to 12 chapters as a part of Samhita Adhyayana-I for First Professional BAMS course. In this revision, NCISM has tried its best to take Samhita teaching beyond the four walls of the classroom and connected it with todays' living of people and society. For effective content delivery and to create interest in the subject of Samhita, it becomes evident to teach Samhita with practical demonstrations.

Samhita Path is the first step and most effective method of Samhita teaching adopted and practiced by our ancient acharyas. In order to facilitate practice the ancient Samhita learning, twice the non-lecture class of the total classes is exclusively reserved for Samhita learning activity. To make baseline uniformity in the process of learning, teaching methodology guidelines are provided which shall be followed while teaching the chapters of both the Samhitas. Students learn various principles of Ayurveda in Samhitas. Terminologies make the task initially difficult. Hence to make the Samhita learning more interesting, various education technology tools are included in the curriculum at various places understanding the need of the topic. Activity-based learning will enable the internalization of the concepts and will build a strong platform while learning other subjects of Ayurved.

As explained in Samhitas things learned in shastra(Science) and experience practically both when happens together will enhance the knowledge. It will further lead to application in practice.

Index

Course Code and Name of Course 5
AyUG-SA1 5
Samhita Adhyayan 1 5
Table 1- Course learning outcomes and matched PO. 5
Table 2 : Contents of Course AyUG-SA1 6
Table 3: Learning objectives (Theory) of Course AyUG-SA1 16
Table 4 : Practical/ Activities for AyUG - SA 1 67
Table 5: Non Lecture Activities Course AyUG-SA1 68
Table 6: Assessment Summary 75
6 A- Number of Papers and Marks Distribution 75
6 B - Scheme of Assessment (formative and Summative) 75
6 C - Calculation Method for Internal assessment Marks (15 Marks) 75
6 D - Evaluation Methods for Periodical Assessment 75
6 E - Paper Layout 76
6 F - Disribution of Theory Exam 76
6 G - Question paper blue print 77
6 H - Distribution of Practical Exam 79
7. Reference books/Resourses 79

Course Code and Name of Course

	Course code	Name of Course
	AyUG-SA1	**Samhita Adhyayan 1**

AyUG SA1 Course

Table 1- Course learning outcomes and matched PO.

SR1 CO No	**A1 Course learning Outcomes (CO) AyUG SA1 At the end of the course AyUG-SA1, the students should be able to-**	**B1 Course learning Outcomes matched with program learning outcomes.**
CO1	Distinguish the different *Samhitas*, their importance and methodology and familiarize with the tools of *Samhita Adhyayan*. (eg: *tantrayukti*)	PO2, PO9
CO2	Interpret and apply the *sutras* from the *Samhitas*.	PO1
CO3	Apply and evaluate the *Tridosha*, *Saptadhatu* and *Mala* principles (theory).	PO1, PO3, PO5
CO4	Practice and prescribe *Dincharya* (daily regimen), *Ritucharya* (seasonal regimen) and dietary principles for preservation of health.	PO2, PO7, PO8
CO5	Explore and distinguish different types of food, food groups and medicinal *dravyas* mentioned in *Samhitas*.	PO1, PO2
CO6	Identify various etiopathological factors and predict different treatment principles	PO1, PO5
CO7	Recognize and explain the fundamentals behind various therapeutics (*Shodhan* and allied) and parasurgical therapies.	PO2, PO5
CO8	Develop a code of behavior and show mature behaviour in particular to the scientific deliberations.	PO 6, PO 9

Table 2 : Contents of Course AyUG-SA1

Sr No	A2 List of Topics AyUG-SA1	B2 Term	C2 Marks	D2 Lecture	E2 Non-Lecture
1.	Introduction to Samhita- i. Definition of Samhita and its types and nomenclature**.** (Samhita- forms, nomenclature, commentary, types etc.) ii. Brief Introduction of Samhitas (Bruhatrayee), their commentaries and commentators (Preceptors, aut hours, redactors, commentators) iii. Tantrayukti, Tantraguna and Tantradosha iv. RachanaShaili & BhashaShaili (Composition and Language style) of Bruhatrayee. v. Anubandha Chatushtya vi. Ashta-Prashna vii. Trividha Jnyanopaya	1	(Indicated in Viva)	15	09
Ashtang Hriday Samhita - Sutrasthan (1-15 Adhyaya) -			50 marks		
2.	AH Su.1. Ayushkamiya Adhyaya- i. Ashtang Hridaya parichaya (Introduction to Ashtang Hridaya) ii. Dosha-dhatu-mala parichaya (Introduction to dosha, dhatus and mala) iii. Agni- koshtha swarup (Concept of digestive fire and bowel habits) iv. Rasa, virya, vipaka prabhav guna parichaya (Introduction to rasa, virya, vipaka, prabhav and guna) v. Rog-aarogya swaroop (Concept of health and disease) vi. Roga-aatur parikshan (Assessment of disease and diseased) vii. Desha and kaala parichaya (Introduction to habitat and time) viii. Chikitsa bheda (Types of treatment) ix. Pada chatushtaya Swaroopam (Concepts of four factors of treatment) x. Vyadhi sadhyasadhyatva (Types of prognosis)	1		08	03

	xi. Recitation of important shlokas				
3.	AH Su.2. Dinacharya Adhyaya- i. Dincharya vihaar (Importance of various regimen in Dincharya) ii. Shuddhi Niyam (Personal hygiene) iii. Dharmapalan evam sadvrutta palan iv. Recitation of important shloka	1		05	04
4.	AH Su.3. Rutucarya Adhyaya- i. Shadrutu (Classification of seasons according to Uttarayan and Dakshinayan) ii. Rutucharya (detailed regimen of the six seasons) iii. Rutusandhi (inter-seasonal period) iv. Recitation of important shlokas	1		05	04
5.	AH Su.4. Roganutpadaniya Adhyaya- i. Adharaneeya vega and chikitsa (symptoms arising due to suppression of natural urges and their treatment) ii. Dharneeya vega (Concept of urges which hav eto be suppressed) iii. Shodhan chikitsa (Importance of purification treatments) iv. Hita-aahar-vihar sevan (Importance of following healthy lifestyle) v. Recitation of important shlokas	I		05	04
6.	AH Su.5. Dravadravya Vijnaniya Adhyaya- i. Jala Varga (Water from different sources, various states of water) ii. Dugdha Varga (Milk and milk products) iii. Ikshu Varga (Sugarcane and its products) iv. Madhu varnana (Properties of honey) v. Tail Varga (Oils of various sources) vi. Madya Varga (Types of alcoholic beverages) vii. Mutra Varnana (Types of urine) viii. Recitation of important shlokas	I		05	04
7.	AH Su.6. Annaswaroopa Vijnaneeya Adhyaya- i. Shuka- DhanyanamSamanya Gunah (Properties of various types of cereals)	II		05	03

	ii. Shimbi- Dhanyananam Samanya Gunah (Properties of various types of Pulses) iii. Mamsasya Samanya Gunah (Properties of meat of various animals) iv. Shakayoh Samanya Gunah (Properties of various types of vegetables) v. Phalayoh Samanya Gunah (Properties of various types of Fruits) vi. Kritanna varganam Samanya Gunah (Properties of various types of cooked food) vii. Aushadhanam Samanya Gunah (Properties of various types of medicinal herbs)				
8.	AH Su.7. Annaraksha Adhyaya- i. Rajnikate- Vaidyasthiti (Important place of Vaidya in Kings palace) ii. Savishanna Lakshanam (Properties of poisoned food) iii. Savishanna Pariksha (Examination of food contaminated with poison) iv. Savishanna-Lakshana- Aushadha (Signs of food poisoning and its treatment) v. Viruddha Aahar (Incompatible food and food practices) vi. Satmikaran Krama (Method of adaptation of wholesome food habits and to taper unwholesome food habits) vii. Aahar-Shayan-Abrahmacharya – Trayopasthambha (Three accessary pillars of Health) viii. Recitation of important shlokas	II		04	03
9.	AH Su.8. Matrashitiya Adhyaya- i. AaharMatra (appropriate quantity of food) ii. Heen-matra, ati-matra bhojan dosha (Demerits of excess and less quantity of food) iii. Alasak, Visuchika (Etiopathogenesis and management principles of Vishuchika and Alasak) iv. Apatarpan chikitsa	II		05	04

	v. Types of Ajeerna (indigestion) and its causes vi. Bhojan-samyak yog (Ideal regimen and time for taking food) vii. KukshiVibhag (Imaginary parts of the stomach) viii. Details of Anupan (Liquid consumed along with or after food) ix. Recitation of important shlokas				
10	AH Su.9. Dravyaadi Vijnaniya Adhyaya- i. Dravya shreshthtva(Predominance of Dravya) ii. Dravyasya panchbhautikatvam (Prevalence of Panchamahabhutas in dravyas) iii. Panchbhautik dravyanaam guna(Characteristics of PanchabhautikDravyas) iv. Principles of dravyas viz Veerya-Vipaka- Prabhava v. Recitation of important shlokas	II		04	04
11	AH Su.10. Rasabhediya Adhyaya- i. Shadrasanaam utpatti (Origin of Shadrasa) ii. Shadrasa parichaya (Identity of Six Rasas) iii. Shadrasa karma, guna, atiyoga lakshana (Functions, properties and presentation of excessive intake of Six Rasas.) iv. Recitation of important shlokas	II		05	04
12	AH Su.11. Doshadi Vijnaniya Adhyaya- i. Importance of dosha dhatu mala ii. Dosha dhatu mala prakruta and vaikruta karma (normal and abnormal functions) iii. Dosha dhatu mala ashraya- ashrayi bhava (relation between dosha and dhatus) iv. Samanya chikitsa siddhanta for dosha dhatu mala vruddhi kshaya (treatment principles) v. Agni (Digestive fire) vi. General pathophysiology for origin of diseases vii. Ojus (Essence of dhatus)	III		08	05

	viii. Vriddhi-kshaya bheshaja ix. Recitation of important shlokas				
13	AH Su.12. Doshabhediya Adhyaya- i. Dosha and dosha bheda (Dosha and their types) ii. Dosha chaya, prakopa, prasham karanani (Causes of dosha accumulation, aggregation and alleviation) iii. Trividhakarana (three causative factors of disease) iv. Trividha Roga marga (three pathways of disease) v. Aatura parikshbhaav (assessment methods) vi. Recitation of important shlokas	III		08	05
14	AH Su.13. Doshopakramaniya Adhyaya- i. Tridosha- upakrama (Treatment principles of vitiated doshas) ii. Shuddha-ashuddha chikitsa lakshana (Accurate and inaccurate treatment) iii. Dosha gati (movement of doshas inside the body) iv. Concept of aama v. Dasha aushadha-kaala (ten types of times for administering medicines) vi. Recitation of important shlokas vii. Research Updates – Langhan : Fasting and autophagy induction – how cell recycle and renew theor content, a process called autophagy.	III		07	06
15	AH Su.14. Dvividhopakramaniya Adhyaya- i. Concept of Langhan and Brihan therapies (Treatment procedures for making the body thin and for nourishment) ii. Concept of Shodhan and shaman therapies (Purification and palliative treatments) iii. Concept of Atistaulya and atikarshya (Obesity and emaciation) iv. Recitation of important shlokas	III		05	05

16	AH Su.15. Shodhanadigana Sangraha Adhyaya- i. Groups of dravyas according to specific action ii. Groups of dravyas according to major ingredient as well as action	III		02	04
	Charak Samhita – Sutrasthan (1-12 Adhyaya):		50 marks		
17	Ch S Su 1. Deerghanjiviteeya Adhyaya- i. Ayurvedavataranam (Genealogy of Ayurveda) ii. Arogsya chaturvarge pradhanam karanam iii. Trisutra Ayurveda iv. Details of Shat padartha v. Ayurvedasya lakshanam tatha prayojan vi. Ayusho lakshanam paryayashcha vii. Samanyavisheshayorlakhanam viii. Tridanda ix. Vyadhinam trividho hetusamgrah x. Vyadhinam ashraya tatha Arogasya karanam xi. Atmano lakshanam xii. Details about Sharira and manas dosha xiii. Sadhyaasadhyata vikara chikitsa xiv. Rasa varnanam xv. Dravya bheda xvi. Aushadhinam nama-rupa-upyog gyan xvii. Bhishagbubhushoh kartavyam xviii. Yuktasya bhaishajyasya lakshanam xix. Bhishaktamasya lakshanam xx. Recitation of important shlokas	1		07	02
18	Ch S Su 2. Apamarga Tanduliya Adhyaya- i. Shiro Virechana Dravya & Main Indications ii. Vamana Dravya & Main Indications iii. Virechana Dravya & Main Indications iv. Asthapana Dravya & Main Indications	II		02	03

	v. Anuvasana Dravya & Main Indications vi. Ashtavimshathi Yavagu vii. Panchakarma Mahatwa & Vaidya Guna viii. Recitation of important shlokas				
19	Ch S Su 3. Aragvadhiya Adhyaya- i. Dwa Trimshath Churna Pradeha & Main Indications	II		01	03
20	Ch S Su 4. Shadvirechana-shatashritiya Adhyaya- i. Shadvirechan aashrya ii. Panchkashaya yoni iii. Panchvidh kashaya kalpana iv. Panch kashaya shatani	II		03	04
21	Ch S Su 5. Matrashiteeya Adhyaya- i. MatravatAhara ii. Nature of Ahara (Guru, Laghu) iii. AharaMatra iv. MatravatAharaPhala v. AharaSevanaVidhana on the bases of its nature vi. Swasthavrutta vii. Anjana viii. Dhumapana ix. Nasya x. Dantadhavana xi. Jivhanirlekhana xii. Gandusha xiii. Abyanga xiv. Parimarjana xv. VastraGandhaMalyadiDharana xvi. Shouchavidhi xvii. Kshoura Karma xviii. PadatraDharana xix. ChatraDharana xx. Important Shlokas for recitation xxi. Research Updates: Role of Dinacharya to maintain circadian rhythm Role of therapeutic message for cell rejuevination Mechanism of satiation and proper quantity of food (Sauhitya Matra)	II		03	05

22	Ch S Su 6. Tasyashiteeya Adhyaya- i. Classification Samvastara ii. Visarga Kala iii. Adana kal;a iv. Shadrutuvivechana and Charya v. Hamsodaka vi. Saatmya vii. Important shlokas for recitation viii. Research Updates: What causes the season: Summer and winter solistice- Equinoxes- Rotation of earth around sun.	II		04	04
23	Ch S Su 7. Naveganadharaniya Adhyaya- i. Adharneeya-Dharneeya vega lakshan, chikitsa ii. Vyayam (Details regarding exercise) iii. Ahita sevan evam varjya vidhi iv. Deha prakruti (Body constitution) v. Agantuja evam Pradnyaapradh janya vyadhi evam chikitsa vi. Impotant Shlokas for recitation vii. Research Updates: Corelation of genomic variation with the classification of Prakriti	II		04	04
24	Ch S Su 8. Indriyopakramaniya Adhyaya- i. Enumeration of Indriya, Dravya, Adhishthana, Artha, Buddhi ii. Manas Lakshana iii. Ekatvam of Manas iv. Sattvikatva, Rajasatva and Tamasatva of Manas v. Indriya PanchaPanchaka vi. Adhyatma Dravya Guna Sangraha vii. Mahabhuta – Indriya sambandh viii. Prakriti – Vikriti hetu ix. SadvrittaAnushthana x. Hetuchatushtaya xi. AnuktaSadvritta xii. Important Shlokas for Recitation xiii. Research updates: Mental health and gut microbiota.	II		04	03
25	Ch S Su 9. Khuddakachatushpada Adhyaya- i. Chikitsa Chatushpada ii. Roga-Arogya Lakshana	II		03	03

	iii. Chikitsa Lakshana iv. Vaidya, Dravya (Bheshaja), Paricharaka, Aatura guna v. Vaidya pradhanatva vi. Adnya chikitsak dosha vii. Sadvaidya lakshana viii. Vaidya kartavya ix. Vaidya Vritti x. Recitation of important Shlokas xi. Research Updates: Medical ethics-principles Soft Skill development for medical students Emotional Intelligence as a crucial component in medical edication				
26	Ch S Su 10. Mahachatushpada Adhyaya- i. Catushpaada-bheshajam alam aarogyaayeti (aatreya-krta) ii. Bheshaja-abheshajayo tulyatva pratipaadana – (maitreya-krta) iii. Its conclusion by Atreya iv. Pareekshya-kaarino hi kusalaa bhavanthi v. Cikitsaa sootram vi. Cikitsaayaam yasolaabhe kaaranam vii. Asaadhyaroga-cikitsaayaam haani viii. Further division of saadhya-asaadhyata ix. Sukha-saadhya lakshanam x. Krcchra-saadhya lakshanam xi. Yaapya lakshanam xii. Pratyaakhyeya lakshanam xiii. Benefit of knowledge of prognosis xiv. The versatile usage of the term 'mithyaa-buddhi' xv. Recitation of important shlokas	II		03	03
27	Ch S Su 11. Tisraishaniya Adhyaya- i. TrividhaEshana (Three Desires of life) ii. Paralokaeshana iii. Chaturvidhapariksha iv. Punarjanma siddhi by Chaturvidhapramanas v. Trayopasthambha vi. Trividhabala	III		06	04

	vii. Trividhaayatana viii. Atiyoga, Heenayoga and Mithya yoga of artha, karma and kaala ix. Trividharoga x. Treatment for manasavyadhi xi. Trividharogamarga xii. Trividhavaidya xiii. Trividhaoushadha xiv. Ashtatrika xv. Important Shloka for Recitation				
28	Ch S Su 12. Vatakalakaliya Adhyaya- i. Vata guna ii. Views of various Acharyas on Vata dosha Guna avum Karma iii. Vayu prakop-prasham karan iv. Akupita, kupita vayu karma v. Vata Dosha – Clinical application vi. Akupita-kupita pitta karma vii. Akupita- kupita kapha karma viii. Atreya's exploration on Tridosha ix. Important shloka for recitation	III		04	05 + 15 (for yearly competitions)
• Note- In this column distribution of 130 activity is given. Remaining 130 is for Samhita Pathan.					

Table 3: Learning objectives (Theory) of Course AyUG-SA1

AyUG-SA1 Learning Objective									
A3 Course outcome	**B3 Learning Objective (At the end of the session, the students should be able to)**	**C3 Domain/sub**	**D3 Must to know/ desirable to know/Nice to know**	**E3 Level Does/ Shows how/ Knows how/ Know**	**F3 T-L method**	**G3 Assessment**	**H3 Formative /summative**	**I3 Term**	**J3 Integration**
Topic 1- Introduction To Samhitas: Time (Lecture:-15 ; Non lecture:-09 hours)									
CO1	Explain the term Samhita	Cognitive/ Comprehension	Must know	Knows	Lecture	Written or Viva	F & S	I	
CO1	Identify Bruhatrayee	Cognitive/ Recall	Must know	Knows	Lecturer	Written or Viva	F & S	I	
CO1	Discuss the various Samhitas and Commentaries in brief	Cognitive/ Comprehension	Must know	Knows	Lecturer / Group Discussion	Written or Viva	F & S	I	
CO1	Discuss the various preceptors, aut hours, redactors and commentators in brief	Cognitive/ Comprehension	Must know	Knows	Lecturer	Written or Viva	F & S	I	
CO1	Apply various Tantrayukties like Adhikaran, Yoga, Padarth, Uddesh, Nirdesh, Vaakyashesh, Prayojan, Upadesh, arthapatti, Ekant,	Cognitive/ Application	Must know	Knows how	Lecturer/ Group discussion	Viva	Formative	I	

	Anumat, Vyakhyan, Samshay, Atitavekshan, Anagatavekshan, Swasadnya, Samucchaya, Nidarshan, Nirvachan, Niyog.								
CO1	Describe various Tantraguna	Cognitive/ Comprehension	Must now	Knows how	Lecturer	Written or Viva	Formative and Summative	I	
CO1	Describe various Tantradosha	Cognitive/ Comprehension	Must know	Knows	Lecturer	Written or Viva	Formative and Summative	I	
CO1	Describe rachanashaili (composition style) and bhashashaili (language style) of Samhitas	Cognitive/ Comprehension	Must know	Knows how	Lecturer / Discussion	Written or Viva	F & S	I	Ayurved Itihas
CO1	Discuss about pattern (method) of writing of classical texts	Cognitive / Comprehension	Must know	Knows how	Lecturer	Puzzle	Formative	I	Ayurved Itihas
CO1	State different types of styles of language of classical text	Cognitive/ Recall	Must know	Knows	Lecturer Audio-Visual aids	Viva	Formative and summative	I	
CO1	Interpret Anubandha chatushtya with examples	Cognitive/ Problem solving	Must know	Knows how	Lecturer / Class discussion	Enquiry Based Learning	Formative	I	

CO1	Interpret Ashta Prashna with example	Cognitive/ Problem solving	Must know	Knows how	Lecturer/ Demonstration	Enquiry Based Learning	Formative	I	
Topic 2- Ashtang Hriday Samhita Sutrasthan Chapter-1- Ayushkamiya Adhyaya: **Time** (Lecture:- 08 ; Non lecture- 03 hours)									
CO1	Discuss the hierarchy of Ayurvedotpatti (descend of Ayurveda)	Cognitive /Recall	Must know	Know	Lecture	Written or Viva	F & S	I	
CO1	Explain the significance of Ashtanga Hrudaya	Cognitive /Recall	Must know	Knows how	Lecture	Written or Viva	F & S	I	
CO1	Enlist the eight branches of Ayurveda	Cognitive/ Recall	Must know	Knows how	Lecture	Written or Viva	F & S	I	
CO3	Discuss the concept of dosha with respect to qualities (guna), location in body and time period (kaala)	Cognitive/ comprehensions	Must know	Knows how	Lecture and Group Discussion	Written & Viva	F & S	I	
CO3	Discuss role and superiority of dosha in manifestation of diseases	Cognitive/ comprehensions	Must know	Knows how	Lecture/ Group discussion	Written & Viva	F & S	I	
CO3	Identify the dosha sthanas	Cognitive/ comprehensions	Must know	Knows how	Discussion	Model Making (Working Model)	Formative	I	
CO3	Enlist the saptadhatus and mala.	Cognitive/ Recall	Must know	Know	Lecture	Written & Viva	F & S	I	
CO4	Explain the concept of Samsarga (combination of 2 dosha) & Sannipata	Cognitive/ Comprehension	Must know	Knows how	Lecture	Written & Viva	F & S	I	

	(combination of 3 dosha)								
CO4	Elucidate concept of Prakruti (body constitution)	Cognitive/ Comprehension	Must know	Knows how	Lecture/Discussion	Written & Viva	F & S	I	
CO6	Explain the three types of digestive fire (agni)	Cognitive/ Comprehension	Must know	know How	Lecture/Demonstration in healthy volunteers.	Written or Viva	F & S	I	
CO6	Describe the three types of Koshtha	Cognitive/ Comprehension	Must know	Knows how	Lecture/Demonstration in healthy volunteers.	Written or Viva	F & S	I	
CO5	Explain the effect of rasas on tridosha	Cognitive/ Comprehension	Must know	Knows how	Lecture/ Group discussion	Written & Viva	F & S	I	
CO5	Describe the two types of potencies (Dwividha Virya)	Cognitive/ Comprehension	Must know	Knows how	Lecture/ Group discussion	Written & Viva	F & S	I	
CO5	Describe the three types of Vipaka	Cognitive/ Comprehension	Must know	Knows how	Lecture/ Group discussion	Written & Viva	F & S	I	
CO5	Explain the three types of dravya on the basis of Prabhav	Cognitive/ Comprehension	Must know	Knows how	Lecture/ Group discussion	Written & Viva	F & S	I	
CO5	Explain the concept of Vruddhi &Kshaya (increase and decrease)	Cognitive/ Comprehension	Must know	Knows how	Lecture/ Group discussion	Written & Viva	F & S	I	

CO6	Discuss the causative factors of health and disease	Cognitive/ comprehe nsions	Must know	Know how	Lecture/group discussion	Puzzle / Viva	Formativ e and summati ve	I	
CO6	Define health (aarogya) and disease stage(roga)	Cognitive/ Recall	Must know	Know	Lecture	Written & Viva	Formativ e and summati ve	I	
CO6	Explain prakruta (normal) and vikruta (abnormal) conditions	Cognitive/ comprehe nsions	Must know	Knows how	Lecture	Written & Viva	Formativ e and summati ve	I	
CO6	Explain the types of diseases (Roga)	Cognitive/ Comprehe nsion	Must know	knows How	Lecture	Written or Viva	F & S	I	
CO6	Explain the concept of Roga Adhishthana (abode of diseases)	Cognitive/ Cognitive/ Comprehe nsion	Must know	Knows how	Lecture	Written or Viva	F & S	I	
CO6	Enumerate Manas dosha	Cognitive/ Recall	Must know	Knows how	Lecture	Written or Viva	F & S	I	
CO6, CO8	Discuss the methods of assessment of patient	Cognitive/ Comprehe nsion	Must know	Knows How	Lecture	Written or Viva	F & S	I	
CO8	Explain the methods of examination of disease	Cognitive/ Comprehe nsion	Must know	Knows how	Lecture/OPD clinics	Written & Viva	F & S	I	
CO6	Explain the three types of habitats(desha)	Cognitive/ Comprehe nsion	Must know	Knows how	Lecture/Multimedia aids	Written or Viva	F & S	I	

CO6	Explain the two types of Bheshaja Kala	Cognitive / Comprehension	Must know	Knows how	Lecture	Written or Viva	F & S	I	
CO6	Explain the Classification the treatment modules (Aushadha)	Cognitive / Comprehension	Must know	Know How	Lecture	Written or Viva	F & S	I	
CO6	Explain the treatment module for mental diseases (Mano Dosha Aushadham)	Cognitive / Comprehension	Must know	Knows how	Lecture	Written or Viva	F & S	I	
CO6, CO8	Elaborate chikitsa chatuspada (4 factors in treatment)	Cognitive /Comprehension	Must know	Know How	Lecture/ Demonstration in hospital	Written or Viva	F & S	I	
CO6	Explain the types of prognosis of disease	Cognitive/ Comprehension	Must know	Know How	Lecture/ Demonstration on patients / Multimedia aids	Written or Viva	F & S	I	
CO6	Explain Concept of anupakramaneeya Atura Lakshana	Cognitive/ Comprehension	Must know	Knows how	Lecture	Written or Viva	F & S	I	
CO1	Enlist the chapters of Sutra Sthana	Cognitive/ Comprehension	Must Know	Knows	Self-learning	Written or Viva	F & S	I	
CO1	Enlist all Sthana and Adhyayas of Ashtang Hridaya and Uttara Tantra	Cognitive/ Recall	Nice to Know	Knows	Self-learning	Written or Viva	F & S	I	
CO2	Recite the shloka from 1 to 35	Cognitive/ Recall	Must Know	Show	Self-learning	Viva	F & S	I	
CO1	Identify Adhikaran, Yoga, Padarth, Uddesh,	Cognitive/ Application	Must know	Knows how	Lecturer/ Group discussion	Viva	F & S	I	

	Anagatavekshan Tantrayukti in this chapter.								
Topic -3. Ashtang Hriday Samhita Sutrasthan Chapter-2- Dinacharya Adhyaya Time (Lecture:- 05 Non lecture- 04 hours)									
CO4	Explain the need of waking up before sunrise	Cognitive/ Comprehension	Must know	Know how	Lecture	Written & Viva	F & S	I	
CO4	Explain the importance of Shaucha Vidhi	Cognitive/ Comprehension	Must know	Knows how	Lecture	Written & Viva	F & S	I	
CO4	Explain the importance and contraindications of brushing (Dantadhavana)	Cognitive/ Comprehension	Must know	Knows how	Lecture/ Multimedia aids	Written & Viva	F & S	I	
CO4	Identify the herbs used for Dantadhavan	Cognitive/ Application	Must know	Shows how	Herbal garden visit	Written or Viva Group Activity (For identifications of Currently using tooth paste. Herbal pastes. Types of pastes)	F & S	I	Dravya guna dept
CO4	Distinguish Sauveeranjana and Rasanjan	Cognitive/ Comprehension	Must know	Know how	Lecture/Demonstration	Written or Viva Debate (Students will search benefits and harms supported by current literature. Dabate in class)	F & S	I	Visit to Rasashastra dept for Identification of drugs

CO4	Discuss contraindications of betel leaf consumption (Tambula)	Cognitive/ Application	Must know	Know how	Lecture/ Debate on benefits and harms of Betel leaf consumtion. supported by current literature.	Written or Viva	F & S	I	
CO4	Elaborate the concept of Abhyanga along with contraindications	Cognitive/ Comprehe nsion	Must know	Know How	Lecture/ /Multimedia aids	Written & Viva	F & S	I	Panchk arma dept
CO4	Discuss the importance, contraindications of exercise	Cognitive/ Application	Must know	Knows How	Lecture/ Multimedia aids	Written & Viva	F & S	I	
CO4	Discuss the rules regarding exercise and adverse effects of excessive exercise	Cognitive/ Application	Must know	Knows how	Group Discussion Debate: Types of Exercise. e.g Arobiuc and anaerobic etc. supported by current literature discussions on Concept.	Written & Viva	F & S	I	
CO4	Explain the benefits of powder massage (udvartan)	Cognitive/ Comprehe nsion	Must know	Know how	Lecture/demonstration ECE	Written & Viva	F & S	I	Panchk arma dept
CO4	Elucidate the benefits and contraindications of bathing (snana)	Cognitive/ Comprehe nsion	Must know	Knows how	Lecture/group discussion Literature search and Discussion by students.	Written & Viva	F & S	I	
CO4	Explain the time of having food.	Cognitive/ Comprehe nsion	Must know	Know how	Lecture	Written or Viva	F & S	I	
CO4	Explain rules regarding natural	Cognitive/ Comprehe	Must know	Know how	Lecture	Written or Viva	F & S	I	

	urges.	nsion							
CO4	Explain the importance of righteousness (Dharmapalan)	Cognitive/ Comprehe nsion	Must know	Know how	Flipped Classroom Group Activity: self identification of Mistake they are doing Plan to rectify and reassessment after duration.(6 months)	Written or Viva	F & S	I	
CO4	Enumerate the types of bad deeds(Dasha Vidha Papakarma)	Cognitive/ Recall	Must know	Know How	Flipped Classroom	Written or Viva	F & S	I	
CO4, CO8	Explain the concept of good principles and conduct (Sadvrutta)	Cognitive	Must know	Knows how	Flipped Classroom	Written or Viva	F & S	I	
CO4	Explain the principles of personal hygiene (shuddhi)	Cognitive/ Comprehe nsion	Must know	Knows how	Flipped Classroom	Written or Viva	F & S	I	
CO2	Recite the shlokas from 1 to 48	Cognitive/ Recall	Must know	Show	Self-learning	MCQ/viva/quiz	F & S	I	
CO8	Assess and observe the Dincharya Priciples.	Skill	Must know	Does	Proforma based assessment in healthy volunteers/ patients.	Work book- Viva	F & S	I	
CO8	Justify the importance of Dincharya	Cognitive/ Applicatio n	Must know	Does	Application of Principles in own life	Viva	F & S	I	
CO1	Identify Upadesh, Ekant, Prayojan Tantrayukties in this chapter.	Cognitive/ Applicatio n	Must know	Knows how	Lecturer/ Group discussion	Viva	F & S	I	

Topic – 4. Ashtang Hriday Samhita – Sutrasthan Chapter 3- Rutucarya Adhyaya-Time (Lecture:- 05 ; Non lecture 04 hours)									
CO4	Explain the six seasons and the months in which they fall	Cognitive/ Comprehension	Must know	Knows	Lecture/group discussions/Multimedia aids	Written & Viva	F & S	I	
CO4	Elicudate the status of strength (bala) in Uttarayana and Dakshinayana	Cognitive/ Recall	Must know	Knows How	Lecture/group discussions/Multimedia aids	Written & Viva	F & S	I	
CO4	Explain the relation between strength (bala)& seasons	Cognitive/ Comprehension	Must know	Knows How	Lecture	Written & Viva	F & S	I	
CO4	Discuss the climatic conditions, health status(bala, agni, dosha), appropriate food and regimen for Hemant rutu.	Cognitive/ Application	Must know	Knows How	Lecture/group discussions/Multimedia aids	Written or Viva	F & S	I	
CO4	Discuss the climatic conditions, health status (bala, agni, dosha), appropriate food and regimen for Shishira rutu.	Cognitive/ Application	Must know	Knows How	Lecture/group discussions/Multimedia aids	Written & Viva	F & S	I	
CO4	Discuss the climatic conditions, health status (bala, agni, dosha), appropriate food and regimen for Shishira rutu.	Cognitive/ Application	Must know	Knows How	Lecture/group discussions/Multimedia aids	Written or Viva	F & S	I	
	Discuss the climatic conditions, health status (bala, agni,	Cognitive/ Application	Must know	Knows How	Lecture/group discussions/Multimedia aids	Written & Viva	F & S	I	

	dosha), appropriate food and regimen for Greeshma rutu.								
CO4	Discuss the climatic conditions, health status (bala, agni, dosha), appropriate food and regimen for Varsha rutu.	Cognitive/ Application	Must know	Knows How	Lecture/group discussions/Multimedia aids	Written & Viva	F & S	I	
CO4	Discuss the climatic conditions, health status (bala, agni, dosha), appropriate food and regimen for Sharad rutu.	Cognitive/ Application	Must know	Knows How	Lecture/group discussions/Multimedia aids	Written & Viva	F & S	I	
CO8	Justify the importance of Rutucharya	Affective	Must Know	Does	Group discussions	Viva	F & S	I	
CO4	Describe the special instructions pertaining diet (rasa, guna) and seasons	Cognitive/ Comprehension	Must know	Knows How	Lecture/group discussions/Multimedia aids	Written & Viva	F & S	I	
CO4	Identify the significance of Rutusandhi	Cognitive/ Comprehension	Must know	Knows How	Lecture	Written or Viva	F & S	I	
CO2	Recite the shloks - 1 to 6, 55-58	Cognitive/ Recall	Must Know	Show	Self learning	Written/viva/quiz	F & S	I	
CO4	Apply the Principles of Rutucharya in practice	Skill	Must Know	Does	Proforma based assessment of healthy individuals or patients	Viva	F & S	I	
CO1	Identify Prayojan, Swasdnya, Apadesh Tantrayukties in this chapter.	Cognitive/ Application	Must know	Knows how	Lecturer/ Group discussion	Viva	F & S	I	

Topic -5 Ashtang Hriday Samhita – Sutrasthan- Chapter 4. Roganutpadaniya Adhyaya--**Time** (Lecture:- 05 ; Non lecture 04 hours)									
CO6	Enlist the adharaneeya vega (natural urges not to be suppressed by force)	Cognitive/ Recall	Must know	Knows How	Lecture	Written & Viva	F & S	I	
CO6	Specify the diseases due to suppression of adhovata (flatus) and its treatment	Cognitive/ Recall	Must know	Knows How	Lecture	Written & Viva	F & S	I	
CO6	Specify the diseases due to suppression of purisha (fecal matter/ defecation) and its treatment	Cognitive/ Recall	Must know	Knows How	Lecture	Written & Viva	F & S	I	
CO6	Specify the diseases due to suppression of mootra (urine) and its treatment	Cognitive/ Recall	Must know	Knows How	Lecture	Written & Viva	F & S	I	
CO6	Specify the diseases due to suppression of udgaar (belching) and its treatment	Cognitive/ Recall	Must know	Knows How	Lecture	Written & Viva	F & S	I	
CO6	Specify the diseases due to suppression of kshvathu (sneezing) and its treatment	Cognitive/ Recall	Must know	Knows How	Lecture	Written & Viva	F & S	I	
CO6	Specify the diseases due to suppression of trushna (thirst) and its treatment	Cognitive/ Recall	Must know	Knows How	Lecture	Written & Viva	F & S	I	

CO6	Specify the diseases due to suppression of kshudha (hunger) and its treatment	Cognitive/ Recall	Must know	Knows How	Lecture	Written/viva	F & S	I	
CO6	Specify the diseases due to suppression of nidra (sleep) and its treatment	Cognitive/ Recall	Must know	Knows How	Lecture	Written & Viva	F & S	I	
CO6	Specify the diseases due to suppression of kaasa (cough) and its treatment	Cognitive/ Recall	Must know	Knows	Lecture	Written & Viva	F & S	I	
CO6	Enumerate the diseases due to suppression of shrama shwasa and its treatment	Cognitive/ Recall	Must know	Knows	Lecture	Written & Viva	F & S	I	
CO6	Specify the diseases due to suppression of jrumbha (yawning) and its treatment	Cognitive/ Recall	Must know	Knows	Lecture	Written & Viva	F & S	I	
CO6	Specify the diseases due to suppression of ashru (tears) and its treatment	Cognitive/ Recall	Must know	Knows	Lecture	Written & Viva	F & S	I	
CO6	Specify the diseases due to suppression of vaman(vomiting) and its treatment	Cognitive/ Recall	Must know	Knows How	Lecture	Written & Viva	F & S	I	
CO6	Specify the diseases due to suppression of shukra (semen) and its treatment	Cognitive/ Recall	Must know	Knows How	Lecture	Written & Viva	F & S	I	

CO6	Describe the incurable condition of Vegadharan	Cognitive/ Comprehension	Must know	Knows How	Lecture	Written or Viva	F & S	I	
CO6	Explain vegdharan as the root cause for many diseases and its common treatment	Cognitive/ Comprehension	Must know	Knows How	Lecture	Written & Viva	F & S	I	
CO6	Explain the dharaneeya vega (urges to be controlled)	Cognitive/ Comprehension	Must know	Knows How	Lecture/ Group discussion	Written or Viva	F & S	I	
CO8	Justify the importance of adharneeya and dharneeya vega to maintain health	Cognitive/ Application	Must know	Does	Group discussions	Group discussions/ Class activities	F & S	I	
CO6	Explain importance of Shodhana chikitsa (purification techniques)	Cognitive/ Comprehension	Must know	Knows How	Lecture	Written & Viva	F & S	I	
CO6	Explain the importance of Brumhana after Shodhana chikitsa	Cognitive/ Comprehension	Must know	Knows How	Lecture	Written & Viva	F & S	I	
CO6	Explain the concept of Aagantu roga (traumatic diseases) and its treatment	Cognitive/ Comprehension	Must know	Knows How	Lecture	Written or Viva	F & S	I	
CO6	Discuss the concept of rutu-shodhana (elimination of doshas according to seasons)	Cognitive/ Application	Must know	Knows How	Lecture/Group Discussion	Written & Viva	F & S	I	

CO6 CO8	Describe the importance of healthy diet and regimen.	Cognitive/ Comprehension	Must know	Knows How	Lecture/Group discussion	Written & Viva	F & S	I	
CO6	Comply with health rules regarding vegdharan and hita-aahar-vihar.	Cognitive/ Comprehension	Must know	Shows		Group discussion/ Class activities	F & S	I	
CO2	Recite the shlokas from number 1 to 22, 24-31, 35	Cognitive/ Recall	Must know	Show	Self-learning	Written/viva/quiz	F & S	I	
CO3, CO6	Assess the sign and symptoms caused due to suppression of Adharaneeya Vegas.	Skill	Must Know	Show how	Proforma based assessment in healthy volunteers/patients.	Problem based assessment	Formative	I	
CO1	Identify Uddesh, Nirdesh, Tantrayukties in this chapter.	Cognitive/ Application	Must know	Knows how	Lecturer/ Group discussion	Viva	F & S	I	
Topic -6 Ashtang Hriday Samhita – Sutrasthan- Chapter 05 Dravadravya Vijnaniya Adhyaya--**Time** (Lecture:- 05 ; Non lecture 04 hours)									

CO5	Differentiate between Gangambu (rain water) and Samudrambu (sea water)	Cognitive/ Comprehension	Desirable	Knows	Lecture discussion	Written or Viva	Formative	I	
CO5	Describe attributes of water from different sources	Cognitive/ Comprehension	Nice to know	Knows	Lecture discussion	Written or Viva	Formative	I	
CO5	Explain the utilities of different states of water (avoiding of drinking water, hot water (ushnambu), cold water	Cognitive/ Comprehension	Must know	Knows how	Lecture discussion	Written or Viva	F & S	I	

	(sheetambu), Boiled and cold water (kwathita-sheetambu)								
CO5	Write the qualities of Narikelodakam (coconut water)	Cognitive/ Recall	Must know	Knows	Discussion	Written or Viva	F & S	I	
CO5	Discuss the properties of ksheeram (milk), Dadhi (curd), Takra (mastu), navaneetam (white butter), Ghritam	Cognitive/ Comprehension	Must know	Knows how	Lecture discussion	Written or Viva	F & S	I	
CO5	List Properties of milk (ksheeras) of different sources.	Cognitive/ Recall	Nice to know	Knows	Lecture	Written or Viva	Formative	I	
CO5	Differentiate the properties of ama (unboiled)and shruta (boiled) ksheeram (milk)	Cognitive/ Comprehension	Must know	Knows	Lecture	Written or Viva	F & S	I	
CO5	Explain the rules for curd consumption	Cognitive/ Comprehension	Must know	Know how	Lecture discussion	Written or Viva	F & S	I	
CO5	Write the properties of various milk preparations	Cognitive/ Recall	Nice to know	Know	Lecture discussion	Written or Viva	Formative	I	
CO5	Identify the properties and uses of sugarcane and its products	Cognitive/ Recall	Nice to know	Know	Lecture discussion	Written or Viva	F & S	I	
CO5	Enlist the properties of honey and Identify the various guidelines related to use of honey	Cognitive/ Recall	Must know	Knows how	Lecture discussion	Written or Viva	F & S	I	
CO5	Write the properties of tilatailam (Sesame oil)	Cognitive/ Recall	Must know	Know	Lecture discussion	Written or Viva	F & S	I	

CO5	Identify the characteristics of different oils	Cognitive/ Comprehension	Nice to know	Know	Lecture discussion	Written or Viva	Formative	I	
CO5	Classify various types of madyas (wines)	Cognitive/ Comprehension	Nice to know	Know	Lecture discussion	Written or Viva	Formative	I	
	explain the properties of Shukta, Dhanyamlam, sauveeraka, tushodaka etc.,	Cognitive/ Comprehension	Nice to know	Know	Lecture discussion	Written or Viva	Formative	I	
CO5	Describe the properties and uses of various types of urine	Cognitive/ Comprehension	Nice to know	Know	Lecture discussion	Written or Viva	Formative	I	
CO2	Recite the shlokas- 1,16-17, 20,29-32, 51,52,56	Cognitive/ Recall	Must know	Show	Self-learning	Written or Viva	F & S	I	
CO5	Classify some common dravyas like milk, ghee, sugar, jaggery etc according to their varga (group) and qualities	Skill	Must know	Show how	class Discussion	Viva/ class activities	F & S	I	
CO1	Identify Vaakyashesh, Samucchaya, Yog Tantrayukties in this chapter.	Cognitive/ Application	Must know	Knows how	Lecturer/ Group discussion	Viva	F & S	I	
Topic -7 Ashtang Hriday Samhita – Sutrasthan- Chapter 6. Annaswaroopa Vijnaneeya Adhyaya- **Time** (Lecture:- 05 ; Non lecture 03 hours)									
CO5	To classify the shukadhanya (cereals)	Cognitive/ Recall	Must know	Know	Lecture	Written or Viva	F & S	II	Dravyaguna
CO5	Enumerate the qualities of each shukadhanya (cereals)	Cognitive/ Recall	Desire to know	Know	Lecture	Written or Viva	Formative	II	Dravyaguna
CO5	Classify the shimbidhanya (pulses)	Cognitive/ Recall	Must know	Know	Lecture	Written or Viva	F & S	II	Dravyaguna

CO5	Enumerate the qualities of each shimbi dhanya (pulses)	Cognitive/ Recall	Desire to know	Know	Lecture discussion	Written or Viva	Formative	II	Dravyaguna
CO5	Enumerate the qualities of various types of mamsa (meat)	Cognitive/ Recall	Nice to know	Knows	Lecture discussion	Written or Viva	Formative	II	
CO5	Enumerate the qualities of various types of shaka	Cognitive/ Recall	Must know	Knows	Lecture discussion	Written or Viva	Formative and summative	II	Dravyaguna
CO5	Enumerate the qualities of various types of fruits	Cognitive/ Recall	Desire to know	Knows	Lecture discussion	Written or Viva	Formative	II	Dravyaguna
CO5	Enumerate the qualities of various types of krtannavarga (cooked food)	Cognitive/ Recall	Must to know	Know	Lecture discussion	Written or Viva	Formative and summative	II	Bhaishajyakalpana
CO5	Enumerate the qualities of various types of medicinal dravyas (herbs)	Cognitive/ Recall	Must know	Knows	Lecture discussion	Written or Viva	F & S	II	Dravyaguna
CO5	Classify certain common dravyas according to varga and functions	Skill	Must know	Show how	Group activities	Viva	F & S	II	
CO1	Identify Samucchaya, Prayojan, Tantrayukties in this chapter.	Cognitive/ Application	Must know	Knows how	Lecturer/ Group discussion	Viva	F & S	II	
Topic -8 Ashtang Hriday Samhita – Sutrasthan- Chapter 7. Annaraksha Adhyaya- **Time** (Lecture:- 04 ; Non lecture 03 hours)									
CO8	Describe the role of Rajavaidya (Noble Physiian)	Cognitive/ Comprehension	Nice to know	Know	Discussion	Written or Viva	Formative	II	

CO6	Identify the characteristics adulterated food stuffs	Cognitive/ Comprehension	Nice to know	Knows	Discussion	Written or Viva	Formative	II	Agadatantra
CO6	Describe the symptoms caused by poisoned or adulterated food	Cognitive/ Comprehension	Desire to know	Know	Discussion	Written or Viva	Formative	II	Agadatantra
CO6	Discuss the treatment module for poisoning	Cognitive/ Comprehension	Desire to know	Know how	Discussion	Written or Viva	Formative	II	Agadatantra
CO6	Define virudhahara (incompatible foods) with examples	Cognitive/ Recall	Must know	Know	Lecture discussion	Written & Viva	F & S	II	
CO6	Discuss the treatment methods for virudhahara (incompatible foods)	Cognitive/ Comprehension	Must know	Know how	Lecture discussion	Written & Viva	F & S	II	
CO6	Follow the principles regarding viruddh aahar	Cognitive/ Application	Must know	Know how	Discussion	Class Activities	Formative	II	
CO4	Explain the process of satmikaran (accustomization)	Cognitive/ Comprehension	Must know	Know how	Lecture discussion	Written & Viva	F & S	II	
CO4	Explain the three accessory pillars of life (diet, sleep and non-celibacy)	Cognitive/ Comprehension	Must know	Know how	Lecture discussion	Written & Viva	Formative	II	
CO4	Explicate the significance of judicious sleep	Cognitive/ Comprehension	Must know	Know how	Discussion	Written & Viva	F & S	II	
CO2	Recite the shloka- 45, 48, 50, 53-55	Cognitive/ Recall	Must know	Shows	Self-learning	Written or Viva	F & S	II	
CO1	Identify Nidarshan, Samucchay, Prayojan,	Cognitive/ Application	Must know	Knows how	Lecturer/ Group discussion	Viva	F & S	II	

	swasadnya Tantrayukties in this chapter.								
Topic -9 Ashtang Hriday Samhita – Sutrasthan- Chapter 8. Annaraksha Adhyaya- **Time** (Lecture:- 05 ; Non lecture 04 hours)									
CO4	Explain the importance of matra (proper quantity of food) for maintenance of health	Cognitive/ Comprehension	Must know	Knows how	Lecture	Written or Viva	F & S	II	
CO4	Describe how to quantify food	Cognitive/ Comprehension	Must know	Knows	Lecture	Written or Viva	F & S	II	
CO4	Determine the adverse effects of heena matra (inadequate quantity of food) and atimatra (excess quantity of food) ahara	Cognitive/ Comprehension	Must know	Knows how	Lecture	Written or Viva	F & S	II	
CO6	Discuss the etiopathogenesis, symptoms and treatment principles of Alasaka and Visuchika.	Cognitive/ Application	Must know	Knows how	Lecture/PBL	Written or Viva	F & S	II	
CO6	Classify between various types of Apatarpan therapies	Cognitive/ Comprehension	Must know	Knows how	Lecture	Written or Viva	F & S	II	
CO6	Classify various types of ajeerna	Cognitive/ Comprehension	Must know	Knows how	Lecture	Written or Viva	F & S	II	
CO6, CO4	Enlist unwholesome food items	Cognitive/ Recall	Must know	Knows	Group discussion	Written or Viva	F & S	II	
CO4	Identify various unhealthy food habits	Cognitive/ Comprehension	Must know	Knows	Group discussion	Written or Viva	F & S	II	

CO4	Recommend ideal regimen for consumption of food (aaharvidhi)	Cognitive/ Comprehension	Must know	Knows how	Discussion	Written or Viva	F & S	II	
CO4	Differentiate between the food items recommended and non-recommended for daily use	Cognitive/ Comprehension	Must know	Knows	Lecture Group Activity.	Written or Viva	F & S	II	
CO4	Advise the right order of food items in a meal	Cognitive/ Application	Must know	Does	Discussion/ activities	Viva/ proforma activity	F & S	II	
CO4	Select anupanas (after drink) based on ahara and aushadha	Cognitive/ Comprehension	Must know	Knows how	Lecture/Discussion	Written or Viva	F & S	II	
CO4	Identify the conditions where Anupan is contraindicated	Cognitive/ Comprehension	Desire to know	Knows	Lecture/Discussion	Written or Viva	F & S	II	
CO4	Advise the right time of food consumption (Aahar Kala)	Cognitive/ Application	Must know	Shows	Lecture/Discussion/activities	Written or Viva	F & S	II	
CO2	Recite the shlokas-1-3, 6,7, 17, 19, 20,21, 25-30, 33-34	Cognitive/ Recall	Must know	Shows	Self - learning	Written or Viva	F & S	II	
CO4	Justify the various principles of diet regarding quantity and time	Cognitive/ Application	Must know	Does	Discussion/ activities	Viva/activities	Formaive/Summative	II	
CO1	Identify Prayojan, Upadesh, Padartha, Yog, Swasdnya Tantrayukties in this chapter.	Cognitive/ Application	Must know	Knows how	Lecturer/ Group discussion	Viva	F & S	II	
Topic -10 Ashtang Hriday Samhita – Sutrasthan- Chapter 9. Dravyaadi Vijnaniya Adhyaya-**Time** (Lecture:- 04 ; Non lecture 04 hours)									

CO5	Justify the predominance of Dravya	Cognitive/ Comprehension	Must know	Knows how	Lecture	Written or Viva	F & S	II	
CO5	Elaborate the prevalence of Panchamahabhutas in Dravyas	Cognitive/ Comprehension	Must know	Knows how		Written or Viva	F & S	II	
CO5	Differentiate between Rasa and Anurasa (primary taste and secondary taste)	Cognitive/ Comprehension	Must know	Knows	Lecture	Written or Viva	F & S	II	
CO5	Analyse the characteristics of Panchabhautik dravyas	Cognitive/ Application	Must know	Shows	Lecture	Written or Viva	F & S	II	
CO5	Recognise the aushadatva (medicinal value) of all substances	Cognitive/ Comprehension	Must know	Knows how	Lecture	Written or Viva	F & S	II	
CO5	Demonstrate the importance of Panchabhautikdravyas in restoration and continuation of health.	Cognitive/ Comprehension	Must know	Knows how	Lecture	Written or Viva	F & S	II	
CO5	Explain the importance of Mahabhutas and drug action	Cognitive/ Comprehension	Must know	Knows how	Lecture	Written or Viva	F & S	II	
CO5	Define Veerya and Vipaka	Cognitive/ Recall	Must know	Knows	Lecture	Written or Viva	F & S	II	
CO5	Discuss the types and the various opinions related with Veerya.	Cognitive/ Comprehension	Must know	Knows how	Lecture	Written or Viva	F & S	II	
CO5	Explain Vipaka and its types.	Cognitive/ Comprehension	Must know	Knows	Lecture	Written or Viva	F & S	II	

CO5	Discuss the hierarchy of active principles of Dravya (matter)	Cognitive/ Comprehension	Must know	Knows how	Lecture	Written or Viva	F & S	II	
CO5	Define Prabhava	Cognitive/ Recall	Must know	Knows	Lecture	Written or Viva	F & S	II	
CO5	Recall the exemplified functions of various active principles	Cognitive/ Recall	Must know	Knows	Lecture	Written or Viva	F & S	II	
CO5	Describe the Saman pratyayarabdha and Vichitra-pratya-arabdha Dravyas.	Cognitive/ Comprehension	Must know	Knows how	Lecture	Written or Viva	F & S	II	
CO2	Recite the shlokas – 1,2,3, 4,10, 12, 13, 20,26,27,28	Cognitive/ Recall	Must know	Knows	Self-learning	Written , Viva/quiz	F & S	II	
CO1	Identify Swasdnya, Nirvachan Tantrayukties in this chapter.	Cognitive/ Application	Must know	Knows how	Lecturer/ Group discussion	Viva	F & S	II	
Topic -11 Ashtang Hriday Samhita – Sutrasthan- Chapter 10. Rasabhediya Adhyaya- **Time** (Lecture:- 05 ; Non lecture 04 hours)									
CO2	Describe the formation of rasa from mahabhoota	Cognitive/ Comprehension	Must know	Know	Lecturer Audio-Visual aids	Written or Viva	Formative or Summative	II	Dravyaguna
CO2	Identify the examples and exceptions of the six rasa	Cognitive/ Comprehension	Must know	Know	Lecturer Audio-Visual aids	Written or Viva	Formative or Summative	II	Dravyaguna
CO2	Explain the features of six rasa with examples and exceptions	Cognitive/ Comprehension	Must know	Knows how	Lecturer Audio-Visual aids	Written or Viva	Formative or Summative	II	
CO2	Explain the functions of six rasa	Cognitive/ Comprehension	Must know	Knows how	Lecturer Audio-Visual aids	Written or Viva	Formative or Summative	II	

CO2	Describe the symptoms due to excess use (atiyog) of the six rasa	Cognitive/ Comprehension	Must know	Knows how	Lecturer Audio-Visual aids	Written or Viva	Formative or Summative	II	
CO2	Analyze the tartamatva of rasas (hierarchy of rasa on the basis of characteristics)	Cognitive/ Application	Must know	Knows how	Lecturer Audio-Visual aids	Written or Viva	Formative or Summative	II	Dravyaguna
CO2	Enlist the 63 types of permutation and combination of rasa	Cognitive/ Recall	Nice to know	Know how	Lecturer Audio-Visual aids	Written or Viva	F & S	II	Dravyaguna
CO2	Classify the dravyas according to the rasa skand (group)	Skill	Must know	Know how	Discussion/ activities based proformas	Viva/Activities	F & S	II	
CO2	Recite the shloks-1-21, 33-38	Cognitive/ Recall	Must know	Knows	Self-learning	Written or Viva	F & S	II	
CO1	Identify Uddesh, Nirdesh, Apavarga Tantrayukties in this chapter.	Cognitive/ Application	Must know	Knows how	Lecturer/ Group discussion	Viva	F & S	II	
Topic -12 Ashtang Hriday Samhita – Sutrasthan- Chapter 11. Doshadi Vijnaniya Adhyaya- **Time** (Lecture:- 08 ; Non lecture 05 hours)									
CO3.	Discuss the importance of dosha dhatu mala	Cognitive/ Application	Must know	Know how	Lecturer Audio-Visual aids	Written & Viva	Formative or Summative	III	
CO3.	Explain dosha dhatu mala prakruta karma (normal functions)	Cognitive/ Comprehension	Must know	Knows how	Lecturer Audio-Visual aids	Written & Viva	Formative or Summative	III	

CO3	Identify the normal functions of dosha, dhatu and mala	Skill	Must know	Show How	Activity based proformas	Viva/ through various Activities	Formative or Summative	III	
CO3.	Explain dosha dhatu mala vaikruta (vruddha and ksheena) karma (abnormal functions)	Cognitive/ Comprehension	Must know	Knows how	Lecturer Audio-Visual aids	Written & Viva	Formative or Summative	III	
CO3	Identify the effects due to vruddhi (increase) or kshaya (decrease) of dosha,dhatu and mala	Skill	Must know	Show How	Activity based proformas	Viva/ through various Activities	Formative or Summative	III	
CO3.	Explain the relation between dosha and dhatu.	Cognitive/ Comprehension	Must know	Know how	Lecturer Audio-Visual aids	Written & Viva	Formative or Summative	III	
CO5	Explain the treatment principles for vitiated dosha, dhatu and mala	Cognitive/ Comprehension	Must know	Know how	Lecturer Audio-Visual aids	Written & Viva	Formative or Summative	III	
CO3.	Elucidate the concept of agni	Cognitive/ Comprehension	Must know	Know how	Lecturer Audio-Visual aids	Written & Viva	Formative or Summative	III	
CO3	Discuss Superiority of Jatharagni	Cognitive/ Application	Must know	Know how	Lecture, Discussion	Written & Viva	Formative or Summative	III	
CO3	Assess the status of Agni.	Skill	Must know	Shows	Activities	Viva/Activites	Formative or Summative	III	
CO6.	Explain the general pathophysiology for origin of Diseases	Cognitive/ Comprehension	Must know	Know how	Lecturer Audio-Visual aids	Written or Viva	Formative or Summative	III	

CO3 CO6	Explain the concept of Ojas	Cognitive/ Comprehension	Must know	Know how	Lecture, Discussion	Written or Viva	Formative or Summative	III	
CO3 CO6	Explain aetiological factors for Ojakshaya	Cognitive/ Comprehension	Must know	Know how	Lecturer	Written or Viva	Formative or Summative	III	
CO3 CO6	Explain Ojakshaya Lakshana	Cognitive/ Comprehension	Must know	Know how	Lecture, Discussion	Written or Viva	Formative or Summative	III	
CO3 CO6	Identify Ojakshaya Lakshana	Skill	Must know	Show how	Lecturer Audio-Visual aids	Viva/activities	Formative or Summative	III	
CO5	Discussgeneral diet principles for vriddhi and kshaya (vitiatied doshas)	Cognitive/ Application	Must know	Show How	Activity based proformas	Viva/ planned activities	Formative or Summative	III	
CO2	Recite shlokas from 1 to 45	Cognitive	Must Know	Knows	Self-learning	Written or Viva	Formative or Summative	III	
CO1	Identify Samucchaya, Adhikaran, Vakyashesh Tantrayukties in this chapter.	Cognitive/ Application	Must know	Knows how	Lecturer/ Group discussion	Viva	F & S	III	
Topic -13 Ashtang Hriday Samhita – Sutrasthan- Chapter 12. Doshabhediya Adhyaya- **Time** (Lecture:- 08 ; Non lecture 05 hours)									
CO3	Enumerate the seats of vata, pitta and kapha doshas	Cognitive/ Recall	Must know	Knows	Lecturer Audio-Visual aids	Written or Viva	Formative or Summative	III	
CO3	Enlist types of vata, pitta and kapha dosha.	Cognitive/ Recall	Must know	Knows	Lecturer Audio-Visual aids	Written or Viva	Formative or Summative	III	
CO3	Describe the specific seats and functions of types of vata, pitta and kapha doshas.	Cognitive/ Recall	Must know	Knows	Lecturer Audio-Visual aids	Written or Viva	Formative or Summative	III	

CO3	Discuss the importance of types of vata, pitta and kapha doshas.	Cognitive/ Application	Must know	Knows how	Lecturer Audio-Visual aids	Written or Viva	Formative or Summative	III	
CO3	Identify the different types of dosha according to location and functions	Skill	Must know	Knows how	Proforma based activities	Written or Viva	Formative or Summative	III	
CO3	Elucidate the concept of Chaya (accumulation), Prakopa (aggravation) and Prashama (alleviation) of vata, pitta and kapha doshas.	Cognitive/ Comprehension	Must know	Knows how	Lecturer Audio-Visual aids	Written or Viva	Formative or Summative	III	
CO3	Discuss the impact of seasonal variation in accumulation and aggravation of vata, pitta and kapha doshas.	Cognitive/ Application	Must know	Knows how	Lecturer Audio-Visual aids/Discussion	Written or Viva	Formative or Summative	III	
CO3	Discuss the superiority of dosha in manifestation of diseases	Cognitive/ Application	Must know	Know how	Lecturer Audio-Visual aids/Discussion	Written or Viva	Formative or Summative	III	
CO3.	Identify general aetiological factors responsible for manifestation of diseases	Cognitive/ Application	Must know	Know how	Lecturer/ Discussion	Written or Viva	Formative or Summative	III	
CO3	Describe Trividha Roga marga (pathways of diseases)	Cognitive/ Comprehension	Must know	Knows	Lecturer	Written or Viva	Formative or Summative	III	
CO3	Enlist various disorders of Trividha Roga marga (pathways of diseases)	Cognitive/ Recall	Must know	Knows	Lecturer/	Written or Viva	Formative or Summative	III	

CO3	Recognise the importance of concept of Trividha Roga marga in diagnosis and prognosis of diseases.	Cognitive/ Application	Must know	Knows how	Discussion	Written or Viva	Formative or Summative	III	
CO3	Enumerate the symptoms of aggravated Vata-Pitta – Kapha dosha	Cognitive/ Recall	Must know	knows	Lecture, Discussion	Written or Viva	Formative or Summative	III	
CO3	Identify the prakopa lakshana of dosha in various diseases	Skill	Must know	Show How	Discussion, Group activities	Written or Viva	Formative or Summative	III	
CO3	Explain the concept of unnamed diseases	Cognitive/ Comprehension	Must know	Knows how	Lecture, Discussion	Written or Viva	Formative or Summative	III	
CO3	Define svatantra and partantra vyadhi (primary and secondary diseases)	Cognitive/ Recall	Must know	Know	Lecture	Written or Viva	Formative or Summative	III	
CO3	Enumerate the types of assessment methods	Cognitive/ Recall	Must know	Know	Lecture, Discussion	Written or Viva	Formative or Summative	III	
CO3	Demonstrate the types of assessment methods.	Skill	Must know	Shows how.	Group Activities	Viva	Formative	III	
CO3	Explain the concept of Guru Vyadhit and LaghuVyadhit (gravity of disease and contrary presentation)	Cognitive/ Comprehension	Must know	Knows how	Lecture, Discussion	Written or Viva	Formative or Summative	III	
CO3	Enlist the 63 types of Permutation and combination of dosha	Cognitive/ Recall	Nice to know	Knows	Lecture	Written or Viva	Formative or Summative	III	
CO2	Recite the shlokas 1-72	Cognitive/ Recall	Must know	Shows	Self-learning	Written, Viva/Quiz	F & S	III	

CO1	Identify Apadesh, Samucchaya Tantrayukties in this chapter Tantrayukties in this chapter.	Cognitive/ Application	Must know	Knows how	Lecturer/ Group discussion	Viva	F & S	III	
Topic -14 Ashtang Hriday Samhita – Sutrasthan- Chapter 13 Doshopakramaniya Adhyaya-**Time** (Lecture:- 07 ; Non lecture 06 hours)									
CO3	Explain the therapeutic procedures and specific management of vata, pitta and kapha dosha	Cognitive/ Comprehension	Must know	Knows how	Lecture	Written or Viva	F & S	III	
CO6	Explain the seasonal regimen to be adopted in various combinations of vitiated Doshas	Cognitive/ Comprehension	Must know	Knows	Lecture/Group Discussions	Written or Viva	F & S	III	
CO6	Discuss the importance of treatment of doshas in accumulation stage	Cognitive/ Application	Must know	Knows how	Lecture/Group Discussions	Written or Viva	F & S	III	
CO6	Differentiate the accurate and inaccurate therapeutic procedures.	Cognitive/ Comprehension	Must know	Knows how	Lecture/Group Discussions	Written or Viva	F & S	III	
CO6	Elaborate the factors responsible for movement of doshas from koshta to shakha and shakha to koshta.	Cognitive/ Comprehension	Must to know	Knows how	Lecture	Written or Viva	F & S	III	
CO6	Elaborate the concept of tiryag-gatadosha (migration to other abodes) and its treatment principle.	Cognitive/ Comprehension	Must to know	Knows how	Lecture	Written or Viva	F & S	III	
CO6	Describe the line of treatment for SthaniDosha (native) and AagantuDosha (immigrant)	Cognitive/ Comprehension	Must to know	Knows how	Lecture	Written or Viva	F & S	III	

CO6	Explain the concept of Aama.	Cognitive/ Comprehension	Must to know	Knows how	Lecture	Written or Viva	F & S	III	
CO6	Enumerate the symptoms of saam and niraam doshas.	Cognitive	Must to know	Knows	Lecture	Written or Viva	F & S	III	
CO6	Elaborate the symptoms of saamadosha and their treatment	Cognitive	Must to know	Knows	Lecture	Written or Viva	F & S	III	
CO6	Analyze the 10 types of aushadha sevan kaal (Time, Method and indications of administration of medicine).	Cognitive/ Application	Must to know	Knows how	Lecture/Discussion	Written or Viva	F & S	III	
CO2	Recite the shlokas-1-41	Cognitive/ Recall	Must know	Shows	Self-learning	Written or Viva	F & S	III	
CO1	Identify Swasadnya, Nidarshan, Uddesh, Nirdesh Tantrayukties in this chapter.	Cognitive/ Application	Must know	Knows how	Lecturer/ Group discussion	Viva	F & S	III	
Topic -15 Ashtang Hriday Samhita – Sutrasthan- Chapter 14 Dvividhopakramaniya Adhyaya-**Time** (Lecture:- 05 ; Non lecture 05 hours)									
CO6	Elaborate the concept of two types of therapies - Langhan and Brihan	Cognitive/ Comprehension	Must know	Know how	Lecture	Written or Viva	F & S	III	
CO6	Describe the indications, methods, benefits of Brihan and symptoms of excess Brihan	Cognitive/ Comprehension	Must know	Know how	Lecture/Discussion	Written or Viva	F & S	III	
CO6	Explain the indications, methods, benefits of Langhan and symptoms of excess Langhan	Cognitive/ Comprehension	Must know	Know how	Lecture/ Discussion	Written or Viva	F & S	III	

CO6	Describe the indications of shodhan and shaman therapies	Cognitive/ Comprehension	Must know	Know how	Lecture	Written or Viva	F & S	III	
CO6	Elaborate the concept of Atisthaulya with the treatment module	Cognitive/ Comprehension	Must know	Know how	Lecture	Written or Viva	F & S	III	
CO6	Elaborate the concept of Atikarshya with the treatment module	Cognitive/ Comprehension	Must know	Know how	Lecture	Written or Viva	F & S	III	
CO2	Recite the shlokas – 1 to 7, 31to 36	Cognitive/ Recall	Must know	Shows	Self-learning	Written or Viva	F & S	III	
CO1	Identify Nirvachan, Samucchay, Nidarshan Tantrayukties in this chapter.	Cognitive/ Application	Must know	Knows how	Lecturer/ Group discussion	Viva	F & S	III	
Topic -16 Ashtang Hriday Samhita – Sutrasthan- Chapter 15, Shodhanadigana Sangraha Adhyaya- **Time** (Lecture:- 02 ; Non lecture 04 hours)									
CO7	SElect the vaman, virechan, niruha, nasya gana according to their functions	Cognitive/ Comprehension	Nice to know	Knows how	Lecture/Multimedia aids	Viva	Formative	III	Dravyaguna
CO7	Define the dravyas with their ingredients and actions.	Cognitive/ Recall	Nice to know	Know	Lecture/Multimedia aids	Viva	Formative	III	
CO7	Identify the dravyas frequently used in treatments	Skill	Nice to know	Shows	Herbal garden visit	Viva	Formative	III	
Topic-17. Charak Samhita Sutrasthan Chapter 1. Dirghamjivitiyam Adhyaya; Time (Lecture:- 07 ; Non lecture 02 hours)									
CO1	Discuss the Ayurvedavataranam (Genealogy of Ayurveda)	Cognitive	Must know	Knows how	Lecture	Written or Viva	F & S	I	
CO8	Discuss the chaturvarga and its main factor for achieving it	Cognitive	Must know	Knows how	Lecture	Written or Viva	F & S	I	

CO6	Discuss about the trisutra of Ayurveda (three principles of health and disease)	Cognitive	Must know	Know how	Lecture	Written or Viva	F & S	I	
CO2	Discuss the about the six padarthas (six basic principles)	Cognitive	Must know	Know how	Lecture	Written or Viva	F & S	I	
CO1	Discuss the characteristics of Ayurveda	Cognitive	Must know	Know how	Lecture	Written or Viva	F & S	I	
CO2	Discuss the characteristics of Ayu (life) and its synonyms	Skill	Must know	Knows how	Lecture	Written or Viva	F & S	I	
CO2	Discuss the characteristics of samanya (similarity) and visha (difference/uniqueness)	Cognitive	Must know	Knows how	Lecture	Written or Viva	F & S	I	
CO2	Discuss about the Tridanda (tripod of life)	Cognitive	Must know	Knows how	Lecture	Written or Viva	F & S	I	
CO2	Discuss the classification and characteristics of the dravyas (basic elements)	Cognitive	Must know	Knows how	Lecture	Written or Viva	F & S	I	
CO2	Discuss the classification and characteristics of the gunas	Cognitive	Must know	Show How	Lecture	Written or Viva	F & S	I	
CO2	Define karma (actions)	Cognitive	Must know	Knows how	Lecture	Written or Viva	F & S	I	
CO2	Explain samavaya (inseparable concomitance)	Cognitive	Must know	Knows how	Lecture	Written or Viva	F & S	I	
CO1	Explain the aims of Ayurveda	Cognitive	Must know	Knows how	Lecture	Written or Viva	F & S	I	

CO6	Explain the three causative factors of disease	Cognitive	Must know	Knows how	Lecture	Written or Viva	F & S	I	
CO6	Explain the abode of vyadhi and arogya	Cognitive	Must know	Show how	Lecture	Written or Viva	F & S	I	
CO2	Discuss the characteristics of Atma	Cognitive	Must know	Know how	Lecture	Written or Viva	F & S	I	
CO6	Explain the sharira and manasa doshas	Cognitive	Must know	Know how	Lecture	Written or Viva	F & S	I	
CO6	Discuss the treatment of sharira and manasa doshas	Cognitive	Must know	knows How	Lecture	Written or Viva	F & S	I	
CO3	Discuss the gunas of vayu and its treatment	Cognitive	Must know	Knows how	Lecture	Written or Viva	F & S	I	
CO3	Discuss the gunas of pitta and its treatment	Cognitive	Must know	Knows how	Lecture	Written or Viva	F & S	I	
CO3	Discuss the gunas of shleshma and its treatment	Cognitive	Must know	Knows How	Lecture	Written or Viva	F & S	I	
CO6	Discuss about the treatment for sadhya and asadhya vikara (curable and incurable disease)	Cognitive	Must know	Knows how	Lecture	Written or Viva	F & S	I	
CO2	Explain the rasa	Cognitive	Must know	Knows how	Lecture	Written or Viva	F & S	I	
CO2	Classify the dravya based on their effects on body and their origin	Cognitive	Must know	Know how	Lecture	Written or Viva	F & S	I	
CO7	Enumerate the dravya based on the useful parts (upayuktanga)	Cognitive	Desirable to know	Know how	Lecture/Multimedia aids	Written or Viva	F & S	I	
CO7	Discuss about the identification of drugs by name, form and its action	Cognitive	Must know	Know how	Lecture/Multimedia aids	Written or Viva	F & S	I	

CO8	Discuss about the duties for one aspires to be a physician.	Cognitive	Must know	Know how	Lecture	Written or Viva	F & S	I	
CO7	Discuss about the best drug	Cognitive	Must know	Know how	Lecture	Written or Viva	F & S	I	
CO8	Discuss about the best physician endowed with all good qualities	Cognitive	Must know	Know how	Lecture	Written or Viva	F & S	I	
CO2	Recite the shlokas 15, 24,28,29, 31, 41, 42, 44-67, 134,135	Cognitive/ Recall	Must know	Shows	Swadhyaya (self learning)	Written or Viva	F & S	I	
CO1	Identify Uddesha, Nirdesh Tantrayukties in this chapter	Cognitive/ Application	Must know	Knows how	Lecturer/ Group discussion	Viva	F & S	I	
Topic-18. Charak Samhita Sutrasthan Chapter 2. Apamarga Tanduliya Adhyaya; **Time** (Lecture:- 02 ; Non lecture 03 hours)									
CO7	Enumerate few Shiro Virechana Dravya & Main Indications	Cognitive	Desirable to know	Knows	Lecture/Audiovisual aids/ Herbal garden visit	Written or Viva	F & S	II	Dravyaguna
CO7	Enumerate few Vamana Dravya & Main Indications	Cognitive	Desirable to know	Knows	Lecture/Audiovisual aids/ Herbal garden visit	Written or Viva	F & S	II	Dravyaguna
CO7	Enumerate few Virechana Dravya & Main Indications	Cognitive	Desirable know	Knows	Lecture/Audiovisual aids/ Herbal garden visit	Written or Viva	F & S	II	Dravyaguna
CO7	Enumerate few Asthapana Basti Dravya & Main Indications	Cognitive	Desirable to know	Knows	Lecture/Audiovisual aids/ Herbal garden visit	Written or Viva	F & S	II	Dravyaguna

CO7	Enumerate few Anuvasana Basti Dravya & Main Indications	Cognitive	Desirable to know	Knows	Lecture/Audiovisual aids/ Herbal garden visit	Written or Viva	F & S	II	Dravyaguna
CO7	Enumerate the names & Main Indications of 28 Types of Yavagu	Cognitive	Desirable to Know	Knows	Lecture/Audiovisual aids	Written or Viva	F & S	II	Rasshastra-bhaishjya dept
CO7	Explain the Importance Of Panchakarma	Cognitive	Must know	Knows	Lectures	Written or Viva	F & S	II	Panchkarma
CO7	Explain the features of Vaidya	Cognitive	Must know	Knows	Lecture/Group Discussion	Written or Viva	F & S	II	
CO7	Recite Shlokas 15,16,36	Cognitive/ Recall	Must know	Shows	Self-learning	Written or Viva	F & S	II	
CO7	Identify the dravyas on the basis of actions	Psychomotor	Must know	Shows	Herbal garden visit	Viva	Summative	II	Dravyaguna
CO1	Identify Upadesh, Samucchaya Tantrayukties in this chapter.	Cognitive/ Application	Must know	Knows how	Lecturer/ Group discussion	Viva	F & S	II	
Topic-19. Charak Samhita Sutrasthan Chapter 3. Aragvadhiya Adhyaya-**Time** (Lecture:- 01 ; Non lecture 03 hours)									
CO7	Mention Thirty Two Churna Pradeha & Main Indications	Cognitive	Desirable to know	Knows	Lectures/Multimedia aids	Written or Viva	Formative	II	Ras-bhaishjya/ Kayachikitsa
Topic-20. Charak Samhita Sutrasthan Chapter 4. Shadvirechana-shatashritiya Adhyaya-**Time** (Lecture:- 03 ; Non lecture 04 hours)									
CO7	List the six abodes of purgatives	Cognitive/ Recall	Must know	Know	Discussion	Written or Viva	F & S	II	Dravya guna
CO7	Enlist the five tastes for medicinal preparation	Cognitive/ Recall	Must know	Know	Lecture, discussion	Written or Viva	F & S	II	Rasashastra &

									bhaishajya Kalpana
CO7	Define the five types of medicinal preparations/ forms	Cognitive/ Recall	Must know	Know	Lecture / Multimedia aids	Written or Viva	F & S	II	Ras-bhaishjya
CO7	Enlist the 50 groups of medicines as per their actions	Cognitive/ Recall	Desirable to know	Know	Lecture	Written or Viva	F & S	II	Dravya guna
CO7	Limitations for description of medicinal drugs in Samhita	Cognitive/ Comprehension	Nice to know	Know how	Lecture	Written or Viva	Formative	II	
CO1	Identify Swasadnya , Samucchaya, Yog Tantrayukties in this chapter.	Cognitive/ Application	Must know	Knows how	Lecturer/ Group discussion	Viva	F & S	II	
Topic-21. Charak Samhita Sutrasthan Chapter-05 Matrashiteeya Adhyaya- **Time** (Lecture:- 03 ; Non lecture 05 hours)									
CO5	Explain Matravat Ahara	Cognitive/ Recall	Must know	Know	Lecturer, Audio-Visual aids, Group Discussion	Written or Viva	**Formative and Summative**	II	Swastarutta
CO5	Define and enlist Nature of Ahara (Guru, Laghu)	Cognitive/ Recall	Must know	Knows how	Lecturer Audio-Visual aids Group Discussion	Written or Viva	**Formative and Summative**	II	Swastarutta
CO5	Explain the significance of MatravatAharaPhala	Cognitive/ Recall	Must know	Know how	Lecturer, Audio-Visual aids, Group Discussion	Written or Viva	**Formative and Summative**	II	Swastarutta
CO5	Discuss role of AharaSevanaVidhana on the bases of its nature	Cognitive/ Comprehension	Must know	Know how	Lecturer Audio-Visual aids	Written or Viva	**Formative and Summative**	II	Swastarutta

					Group Discussion				
CO2	Define Swasthavrutta	Cognitive/ Recall	Must know	Knows	Lecturer Audio-Visual aids Group Discussion	.Viva	**Formative and Summative**	II	Swastarutta
CO6	Explain Anjana	Cognitive/ Comprehension	Must know	Know	Lecturer Audio-Visual aids Group Discussion	Written or Viva	**Formative and Summative**	II	Swastarutta
CO6	Explain Dhumapana	Cognitive/ Comprehension	Must know	Knows how	Lecturer Audio-Visual aids Group Discussion	Written or Viva	**Formative and Summative**	II	Swastarutta, Shalakya , Panchakarma
CO6	Explain Nasya	Cognitive/ Comprehension	Must know	Knows how	Lecturer Audio-Visual aids Group Discussion	Written or Viva	**Formative and Summative**	II	Swastarutta, Shalakya , Panchakarma
CO6	Explain Dantadhavana	Cognitive/ Comprehension	Must know	know How	Lecturer Audio-Visual aids Group Discussion	Written or Viva	**Formative and Summative**	II	Swastarutta,
CO6	Explain Jivhanirlekhana	Cognitive/ Comprehension	Must know	know How	Lecturer Audio-Visual aids Group Discussion	Written or Viva	**Formative and Summative**	II	Swastarutta,
CO6	Explain Gandusha	Cognitive/ Comprehension	Must know	Knows how	Lecturer Audio-Visual aids	Written or Viva	**Formative and Summative**	II	Swastarutta,

					Group Discussion				
CO6	Explain Abhyanga with types	Cognitive/ Comprehension	Must know	Knows how	Lecturer Audio-Visual aids Group Discussion	Written or Viva	**Formative and Summative**	II	Swastarutta,Panchakarma
CO6	Describe Parimarjana	Cognitive/ Comprehension	Must know	Knows how	Lecturer Audio-Visual aids Group Discussion	Written or Viva	**Formative and Summative**	II	Swastarutta,
CO4	Describe the VastraGandhaMalyadiDharana	Cognitive/ Comprehension	Must know	Knows how	Lecturer Audio-Visual aids Group Discussion	Written or Viva	**Formative and Summative**	II	Swastarutta,
CO4	Explain the concept of Shouchavidhi	Cognitive/ Comprehension	Must know	Knows how	Lecturer Audio-Visual aids Group Discussion	Written or Viva	**Formative and Summative**	II	Swastarutta,
CO4	Discuss the Kshoura Karma	Cognitive/ Comprehension	Must know	Know how	Lecturer Audio-Visual aids Group Discussion	Written or Viva	**Formative and Summative**	II	Swastarutta,
CO4	Define PadatraDharan with importance	Cognitive/ Recall	Must know	Know how	Lecturer Audio-Visual aids Group Discussion	Written or Viva	**Formative and Summative**	II	Swastarutta,
CO4	Explain the ChatraDharana	Cognitive/ Recall	Must know	knows How	Lecturer Audio-Visual aids	Written or Viva	**Formative and Summative**	II	Swastarutta,

					Group Discussion				
CO4	Justify the importance of the procedures mentioned as dincharya	Cognitive/ Application	Must know	Shows how	Group Discussion	Group Discussion/ Project work	**Formative and Summative**	II	
CO2	Recite the shlokas 4, 12-13, 34-35, 56-57,68-69, 81-83, 103	Cognitive/ Recall	Must know	Shows	Swadhyaya (self learning)	Viva	F & S	II	
CO1	Identify Upadesh, Padarth,, Nidarshan Tantrayukties in this chapter.	Cognitive/ Application	Must know	Knows how	Lecturer/ Group discussion	Viva	F & S	II	
CO4	Research Updates: Role of Dinacharya to maintain circadian rhythm Role of therapeutic message for cell rejuevination Mechanism of satiation and proper quantity of food (Sauhitya Matra)	Cognitive	Nice to know	Knows how	Lecture; Audio-vidual aids	Group discussion	-	II	
Topic-22. Charak Samhita Sutrasthan Chapter-6. Tasyashiteeya Adhyaya-**Time** (Lecture:- 04 ; Non lecture 04 hours)									
CO2	Discuss the importance of Classification of Samvastara	Cognitive/ Comprehension	Must know	Knows how	Lecture Audio-Visual aids Group Discussion	Written or Viva	Formative and Summative	II	
CO2	Explain the significance of Visarga Kala	Cognitive/ Comprehension	Must know	Know how	Lecture Audio-Visual aids Group Discussion	Written or Viva	Formative and Summative	II	

CO2	Explain the significance of Adana kala	Cognitive/ Recall	Must know	Know how	Lecture Audio-Visual aids Group Discussion	Written or Viva	Formative and Summative	II	
CO4	Explain the nature of climate in Shadrutu	Cognitive/ Recall	Must know	Know how	Lecture Audio-Visual aids Group Discussion	Written or Viva	Formative and Summative	II	
CO4	Explain Sevaniya and Nishiddh Ahara Vihara in Shadrutu	Cognitive/ Recall	Must know	Know how	Lecture Audio-Visual aids Group Discussion	Written or Viva	Formative and Summative	II	
CO4	Define and explain the properties of Hamsodaka	Cognitive/ Recall	Must know	Knows	Lecture Audio-Visual aids Group Discussion	Written or Viva	Formative and Summative	II	
CO4	Justify the regimen mentioned as per seasons	Cognitive/ Application	Must know	Show how	Group Discussion	Group Discussion/ Project work/viva	Formative and Summative	II	
CO2	Describe Saatmya and its types	Cognitive/ Recall	Must know	Knows	Lecture Audio-Visual aids Group Discussion	Written or Viva	Formative and Summative	II	
CO2	Recite Shloka number 18, 21, 29, 35, 45, 49, 50	Cognitive/ Recall	Must know	Knows	Swadhyaya –Self learning	Written or Viva	Formative and Summative	II	
CO1	Identify Uddesh- Nirdesh , swasadnya Tantrayukties in this chapter..	Cognitive/ Application	Must know	Knows how	Lecturer/ Group discussion	Viva	F & S	II	

CO4	Research Updates: What causes the season: Summer and winter solistice- Equinoxes- Rotation of earth around sun.	Cognitive/ Application	Nice to know	Knows	Lecture, Audio-vidual aids	Group discussion	-	II	
Topic-23. Charak Samhita Sutrasthan Chapter-7. Naveganadharaniya Adhyaya-**Time** (Lecture:- 04 ; Non lecture 04 hours)									
CO4	Enumerate Adharaniya and Dharaniya Vega	Cognitive/ Recall	Must to know	know	lecture/ Group discussion/	Written or Viva	F & S	II	
CO4 CO6	Describe symptoms and treatment pattern of Adharaniya Vega	Cognitive	Must to know	Know how	lecture/ Group discussion /quiz	Written or Viva	F & S	II	
CO4	Cite symptoms and treatment pattern of Dharaniya Vega	Cognitive	Must to know	Know how	lecture/ quiz/Group discussion	Written or Viva	F & S	II	
CO4	Quote the contraindicated actions of mind, speech and body.	Cognitive	Must to know	Know	lecture/ quiz/Group discussion	Written or Viva	F & S	II	
CO4	Describe concept, effects and benefits of exercise	Cognitive	Must to know	Know how	lecture/ recitation/ quiz/Audiovisual aids	Written or Viva	F & S	II	Swasthavritta
CO4	describe symptoms due to excessive exercise	Cognitive	Must to know	Know	lecture/ Group discussion/ quiz/Audiovisual aids	Written or Viva	F & S	II	Swasthavritta
CO4	Describe the action which should be avoided in excess	Cognitive	Must to know	Know how	lecture/ Group discussion /quiz	Written or Viva	F & S	II	

CO4	Describe pattern of Ahita Krama tyaga	Cognitive	Must to know	Know how	lecture/ Group discussion/ quiz	Written or Viva	F & S	II	
CO4	Classify deha prakruti	Cognitive	Must to know	Know	lecture/ Group discussion/ quiz	Written or Viva	F & S	II	
CO6	Describe Aagantuj vyadhis (exogenous diseases)	Cognitive	Must to know	Know	lecture/ Group discussion/ quiz	Written or Viva	F & S	II	Nidan
CO6	Describe Pradnyaparadhaj vyadhi	Cognitive	Must to know	Know	lecture/ Group discussion/ quiz	Written or Viva	F & S	II	Nidan
CO4	State Vikar Anutpatti Vidhi (Preventive measures of diseases)	Cognitive	Must to know	Know how	lecture/ Group discussion/ quiz	Written or Viva	F & S	II	
CO6	describe treatment of Aagantuj (exogenous) and Manas (psychological)diseases	Cognitive	Must to know	Know how	lecture/ Group discussion/ quiz	Written or Viva	F & S	II	
CO4	Describe shodhan treatment as per season	Cognitive	Must to know	Know how	lecture/ Group discussion/ quiz	Written or Viva	F & S	II	Panchkarma
CO4	Describe Aapta and anapta purush	Cognitive	Must to know	Know	lecture/ Group discussion/ quiz	Written or Viva	F & S	II	
CO4	Describe the rules of eating curd	Cognitive	Must to know	Know how	lecture/ Group	Written or Viva	F & S	II	

					discussion/ quiz				
CO2	Recite shloka number 27, 28, 29, 30, 31, 39, 40, 55, 60.	Cognitive	Must to know	Know how	lecture/ Group discussion/ quiz	Written or Viva	F & S	II	
CO1	Identify Arthapatti , Nirvachan, Vyakhyan Tantrayukties in this chapter.	Cognitive/ Application	Must know	Knows how	Lecturer/ Group discussion	Viva	F & S	II	
CO4	Research Updates: Corelation of genomic variation with the classification of Prakriti	Cognitive/ Recall	Desire to know	Know	lecture/ Audio-vidual aids	Group discussion	-	II	
Topic-24. Charak Samhita Sutrasthan Chapter-8. Indriyopakramaniya Adhyaya- **Time** (Lecture:- 04 ; Non lecture 03 hours)									
CO2	Enumerate Indriya/ Dravya/Adhishthana/ Artha/ Buddhi	Cognitive/ Recall	Must know	Know	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	II	
CO4	Write the characteristics of Mana	Cognitive/ Recall	Must know	Know	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	II	
CO4	Justify the ektvam of Manas	Cognitive/ Comprehension	Must know	Know	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	II	
CO4	State that Sattvikatva, Rajasatva and Tamasatva of Manas	Cognitive/ Recall	Must know	Know	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	II	
CO4	Tabulate Indriya PanchaPanchaka	Cognitive/ Recall	Must know	Know	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	II	
CO4	Quote Adhyatma Dravya Guna Sangraha	Cognitive/ Recall	Must know	Know	Lectures/ Audio-Visual Aids	Written or Viva	Formative &Summative	II	

CO4	State the predominant Mahabhuta in each Indriya	Cognitive/ Recall	Must know	Know	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	II	
CO4	Know the role of Indriya and Mana in Prakriti and Vikriti	Cognitive/ Recall	Must know	Know	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	II	
CO4	Discuss the Causes and Benefits of Sadvritta Anushthana	Cognitive/ Comprehension	Must know	Know	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	II	
CO4	Elaborate the Do's and Don'ts in Sadvritta	Cognitive/ Recall	Must know	Know	Lectures/ Audio-Visual Aids/ Group Discussion	Written or Viva	Formative & Summative	II	
CO4	Explain Hetuchatushtaya	Cognitive/ Recall	Must know	Know	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	II	
CO4	State the guideline for Anukta Sadvritta	Cognitive/ Recall	Must know	Know	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	II	
CO2	Recite the shloka number 7-13, 34	Cognitive/ Recall	Must know	Shows	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	II	
CO1	Identify Upadesh , Samucchaya, Yog Tantrayukties in this chapter.	Cognitive/ Application	Must know	Knows how	Lecturer/ Group discussion	Viva	Formative & Summative	II	
CO4	Research updates: Mental health and gut microbiota.	Cognitive/ Application	Nice to know	Know	Lectures/ Audio-Visual Aids	Group discussion	-	II	
Topic-2CO Charak Samhita Sutrasthan Chapter-9. Khuddakachatushpada Adhyaya- T**ime** (Lecture:- 03 ; Non lecture 03 hours)									
CO8	Cite Chikitsa Chatushpada (four components of healthcare)	Cognitive	Must know	Know	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	II	

CO8	Define Roga-Arogya (disease-health)	Cognitive/ Recall	Must know	Know	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	II	
CO8	Define Chikitsa (treatment)	Cognitive/ Recall	Must know	Know	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	II	
CO8	List the Qualities of Vaidya (physician)	Cognitive/ Recall	Must know	Know	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	II	
CO8	List the Qualities of Dravya (medicine)	Cognitive/ Recall	Must know	Know	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	II	
CO8	List the Qualities of Paricharaka (nursing staff)	Cognitive/ Recall	Must know	Know	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	II	
CO8	List the Qualities of Aatura (patient)	Cognitive/ Recall	Must know	Know	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	II	
CO8	State the iimportance of Vaidya in the 4 components of healthcare	Cognitive/ Recall	Must know	Know	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	II	
CO8	Write the Complications due to ignorant physician	Cognitive/ Recall	Must know	Know	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	II	
CO8	Describe the Sadvaidya Qualities (good physician)	Cognitive/ Comprehension	Must know	Know	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	II	
CO8	Write the duties of the physician	Cognitive/ Comprehension	Must know	Know	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	II	
CO8	List Four types of Vaidya vritti (attitude of the physician)	Cognitive/ Recall	Must know	Know	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	II	

CO8	Recite the shloka number 3,4,5,18,20,21, 24,25,26	Cognitive/ Recall	Must know	Shows	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	II	
CO8	Discuss the qualities and duties of a good physician	Cognitive/ Application	Must know	Shows how		Written or Viva	Formative	II	
CO1	Identify Uddesh, Nirdesh, Nidarshan Tantrayukties in this chapter.	Cognitive/ Application	Must know	Knows how	Lecturer/ Group discussion	Viva	F & S	II	
CO8	Research Updates: Medical ethics-principles Soft Skill development for medical students Emotional Intelligence as a crucial component in medical edication	Cognitive	Nice to know	Knows	Lecture / Audio-Vidual aids	Group discussion	-	II	
Topic-26. Charak Samhita Sutrasthan Chapter-10. Mahachatushpada Adhyaya- T**ime** (Lecture:- 03 ; Non lecture 03 hours)									
CO6	Substantiation of Chatushpaada- bheshajam alam aarogyaayeti (aatreya-krta), Bheshaja-abheshajayo tulyatva pratipaadana – (maitreya-krta), Its conclusion by Atreya,	Cognitive/ Recall	Desirable to know	Knows	Lecture with substantiation of the point by mentioning contemporary examples	Written & Viva	F & S	II	
CO6	Explain the Cikitsaa sootram- Cikitsaayaam yasolaabhe kaaranam,	Cognitive/ Recall	Desirable to know	Knows	Lecture with substantiation of the point by mentioning	Written or Viva	F & S	II	

					contemporary examples				
CO6	Asaadhyaroga-cikitsaayaam haani,	Cognitive/ Recall	Desirable to know	Knows	Lecture with substantiation of the point by mentioning contemporary examples	Written or Viva	F & S	II	
CO6	Describe the upamaana pramaana	Cognitive/ Recall	Desirable to know	Knows	Lecture with substantiation of the point by mentioning contemporary examples	Written or Viva	F & S	II	
CO6	Enumerate and analyse the further classification of saadhya-asaadhyata	Cognitive/ Recall	Must know	Knows	Lecture with live demonstration in OP	Written or Viva	F & S	II	
CO6	Identify, judge and discuss Sukha-saadhya lakshanam, Krcchra-saadhya lakshanam, Yaapya lakshanam and Pratyaakhyeya lakshanam	Cognitive/ Recall	Must know	Knows how	Lectures and clinical demonstration	Viva / written Problem based assessment	F & S	II	
CO6	Apply and interpret the benefit of knowledge of prognosis	Cognitive/ Recall	Must know	Knows	Lectures	Written or Viva	F & S	II	
CO6	Analyse the term mithyaa-buddhi and accept responsibility to not end up as a mithyaa-buddhi at	Cognitive/ Recall	Must know	Knows	Lectures	Written or Viva Discussions	F	II	

	any point of time of the profession								
CO6	Recite Shloka number 14 to 20	Cognitive/ Recall	Must know	Knows	Lecture, swaadhyaaya	Viva	**F & S**	II	
CO1	Identify Nirnaya, Swasdnya, Sanshaya, Ekant Tantrayukties in this chapter.	Cognitive/ Application	Must know	Knows how	Lecturer/ Group discussion	Viva	F & S	II	
Topic-27. Charak Samhita Sutrasthan Chapter-11. Tisraishaniya Adhyaya- **TIme** (Lecture:- 06 ; Non lecture 05 hours)									
CO4	Explain the significance of the three desires for prana (life) and dhana(means of life).	Cognitive/ Recall	Must know	Know how	Lectures/ Audio-Visual Aids	Written & Viva	Formative & Summative	III	
CO4	Discuss the concept of paraloka	Cognitive/ Recall	Must know	Know how	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	III	
CO4	Discuss different opinions on the concept of punarjanma (re-birth)	Cognitive/ Recall	Must know	Know how	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	III	
CO2	Define characteristics of Aapta	Cognitive/ Recall	Must know	Know	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	III	
CO2	Define pratyaksha, anumana and yuktipramana with example	Cognitive/ Recall	Must know	Know how	Lectures/ Audio-Visual Aids	Lectures/ Audio-Visual Aids	Formative & Summative	III	

CO2	Justify punarjanma by using aaptopadesha, pratyaksha, Anumana and yuktipramana	Cognitive/ Application	Must know	Know how	Lectures/ Audio-Visual Aids	Written or Viva	Formative &Summative	III	
CO4	Explain the importance of thrayopasthamba (sub-pillars of life).	Cognitive/ Application	Must know	Know how	Lectures/ Audio-Visual Aids	Written-MCQ/ SAQ/ LAQ & Viva	Formative & Summative	III	
CO4	Discuss the three types of bala (strength)and its importance.	Cognitive/ Application	Must know	Know how	Lectures/ Audio-Visual Aids	Written & Viva	Formative & Summative	III	
CO6	Describe the three causes of disease.	Cognitive/ Application	Must know	Know	Lectures/ Audio-Visual Aids	Written & Viva	Formative & Summative	III	
CO6	Identify the symptoms due to excessive, less and improper use of sense organs	Cognitive/ Recall	Must know	Know	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	III	
CO6	Identify the symptoms due to excessive, less and improper verbal, psychic and physical actions.	Cognitive/ Recall	Must know	Know	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	III	
CO6	Define Prajnaparadha	Cognitive/ Recall	Must know	Know	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	III	

CO6	Identify the signs of excess, less and improper kaala (season)	Cognitive/ Recall	Must know	Know	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	III	
CO6	Define nija, agantu and manasa roga.	Cognitive/ Recall	Must know	Know	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	III	
CO6	Discuss general treatment protocol for manasavyadhi (psychological disorders)	Cognitive/ Comprehension	Must know	Know how	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	III	
CO6	Discuss the three disease pathways	Cognitive/ Comprehension	Must know	Know	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	III	
CO8	Classify the three types of physicians	Cognitive/ Comprehension	Must know	Know	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	III	
CO6	Describe daivavyapashraya, yuktivyapashraya and satvavajayachikitsa	Cognitive/ Comprehension	Must know	Know how	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	III	
CO6	Describe antahaparimarjana, bahiparimarjana,shastrapranidhanachikitsa.	Cognitive/ Comprehension	Must know	Know how	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	III	

CO2	Discuss importance of ashta trika.	Cognitive/ Application	Must know	Know	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	III	
CO2	Recitation of Shloka number 18,19,20,21,22,23,24, 25, 47.	Skill	Must know	Know	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	III	
CO1	Identify Swasadnyaa, samucchaya , Samshaya, Nirvachan Tantrayukties in this chapter.	Cognitive/ Application	Must know	Knows how	Lecturer/ Group discussion	Viva	F & S	III	
Topic-28. Charak Samhita Sutrasthan Chapter-12. Vatakalakaliya Adhyaya-**TIme** (Lecture:- 04; Non lecture 05 hours)									
CO4	explore the various properties of vata	Cognitive/ Recall	Must know	Knows how	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	III	
CO4	Discuss the opinions of various aacharyas on different aspects of Vata dosha	Cognitive/ Recall	Must Know	Knows	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	III	
CO4	Explore various factors responsible for aggravation and and pacification of vata dosha	Cognitive/ Recall	Must know	Knows how	Lectures/ Audio-Visual Aids/Group Discussion	Written or Viva	Formative & Summative	III	
CO4	enumerate prakrita and vikrita karma of vata	Cognitive/ Recall	Must know	Knows how	Lectures/ Audio-Visual Aids/ Group Discussion	Written or Viva	Formative & Summative	III	
CO4	Explain the clinical application of Vata Guna	Cognitive/ Recall	Desirable to know	Knows how	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	III	

CO4	Describe the action of normal and aggravated Pitta	Cognitive/ Comprehension	Must know	Knows how	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	III	
CO4	Describe the action of normal and aggravated Kapha	Cognitive/ Comprehension	Must know	Knows how	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	III	
CO4	Describe atreya's exploration on Tridosha and its importance	Cognitive/ Comprehension	Must know	Knows how	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	III	
CO4	Recite the shlokas-8,11,12	Cognitive/ Recall	Must know	Shows	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	III	
CO1	Identify Padartha, Vyakhyan , Anumat Tantrayukties in this chapter	Cognitive/ Application	Must know	Knows how	Lecturer/ Group discussion	Viva	Formative & Summative	III	

Table 4 : Practical/ Activities for AyUG - SA 1

Term wise distribution of allotted time				
Term	**Total teaching (400 hrs)**	**Lecture (140 hrs)**	**Non Lecture (260hrs)**	
			Samhita Pathan (130 hrs)	**Activities- In class/ Hospital (130 hrs)**
I	**130 hrs.**	**50 hrs.**	**50**	**30**
II	**140 hrs.**	**50 hrs.**	**40**	**50**
III	**130 hrs.**	**40 hrs.**	**40**	**50**

Table 5: Non Lecture Activities Course AyUG-SA1

Non Lecture activities- (Samhita Pathan / In Class Activities & Hospital Based activities) : 260 hrs

SN	Name of Practical	Term	
1.	Samhita Pathan	I, II, III	Total 130 in all three terms. (Term I-50 hrs; Term II - 40hrs; Term III - 40hrs)
	In Class Activities/ Case Based Activities/ Field Activities		
2.	1. Introduction to Samhita Problem based learning : Application of Tantrayukti for chapter number 1, 2 of Ashtang Hridaya and chapter 1st of charak Samhita.	I	5 hrs.
	Group Activity Interpret Anubandha Chatushtya with examples Interpret Ashta Prashna with example	I	4 hrs
	Ashtang Hriday Samhita - Sutrasthan (1-5Adhyaya)		
3.	AH Su 1. Ayushkamiya Adhyaya Commentary Based activity- Fetch the meaning of important terms on the basis of commentary. (Any 30 important words). Make your own dictionary.	I	3 hrs
4.	AH Su 2. Dinacharya Adhyaya- Survey Activity: Application of concepts- Dincharya and its application: Proforma based assessment in healthy volunteers/ patients. Daily routine shall be recorded on the basis of predesigned proforma and then shall discuss. Communication Skill introduction. Survey Role play.	I	4 hrs

5.	AH Su 3. Rutucarya Adhyaya- Application of concepts- Ritucharya and application - Proforma based assessment in healthy individuals or patients.	I	4 hrs
6.	AH Su 4. Roganutpadaniya Adhyaya- Case Based Activity/Learning- Assess the sign and symptoms of given case on the basis of learning of Adharaneeya Vegas and find out the probable causative factors on the basis of principles taught.	I	4 hrs
7.	AH Su 5. Dravadravya Vijnaniya Adhyaya Group Activity-(Group presentation)- Utility of Dravyas:- Allocate the Dravadravya Vargas among student groups. Every group will Justify (represent) the practical utility of dravyas allotted to them.	I	4 hrs
8.	6. Annaswaroopa Vijnaneeya Adhyaya- Group presentation- Justify the utility of this chapter in present era- Every group will illustrate the utility of their assigned Aahara Dravya Varga (Discuss practically available dravyas)	**II**	3 hrs
9.	7. Annaraksha Adhyaya- Discussion- Explore the present dietary habits- Explore the Various diet combinations used in present society (by four family/ Relatives/ neighborhood) on the basis of principles learned for viruddhahar. Discuss them in class. Trayopastambha -Importance of Nidra- Flipped classroom- Share the prerecorded videos/ other material with students before class. On the basis of these have discussion.	**II**	4 hrs
10.	8. Matrashitiya Adhyaya- Case Based learning- Determine adverse effects of heena matra	**II**	4 hrs

	(inadequate quantity of food) and atimatra (excess quantity of food) ahara:- (Video clip of patient suffering from a type of Ajeerna can be shared in class and then group wise discussion on the concept.) Group Activity- Differentiate between the food items recommended and non-recommended for daily use:- Cross refer the previous chapters and demonstrate the rationale behind the wholesome or unwholesome nature of these enlisted Dravyas referring their qualities.		
11.	9. Dravyaadi Vijnaniya Adhyaya- Application of concepts- Enlist the dravyas according to Rasa, Veerya, Vipaka, Prabhav. (Can refer chapter 5,6,10 of Ashtang Hriday and Chapter 2, 3, 4 of Charak Samhita). Apply the concepts learned in present chapter to understand the action of Dravyas.	**II**	4 hrs
12.	10. Rasabhediya Adhyaya- Case based learning- Prepare proforma enlisting the sign and symptoms of excess consumption of six Rasas and regular diet pattern. Asses the predominance of Rasa consumption in patients or healthy volunteeres. Then Correlate with the case findings.	**II**	4 hrs
13.	11. Doshadi Vijnaniya Adhyaya- Case Based learning-(CBL)- Assess the patient for Vriddhi and Kshaya Lakshanas of Dosha-Dhatu-Mala, based on predesigned proforma. Discuss these case findings later in class.	**III**	5 hrs
14.	12. Doshabhediya Adhyaya- Model making Activity- Working models on Dosha Sthanas or Subtypes of Doshas, Chaya, Prakop and Prashama of Doshas: PBL/CBL	**III**	5 hrs

	Give one problem/case based on Samanya Dosha Nidan. Student will identify possible causative factors responsible for vitiation of Doshas in given problem.		
15.	13. Doshopakramaniya Adhyaya- Case Based learning-(CBL)- Group activity- Observe the signs and symptoms of Ama in any five patients (Group wise) and present and discuss it in class. Seminar Presentation- a. Understand Aushadha Kaal in relation with suntypes of Vata Dosha. b. Recognize the principles applicable during treatment of Saam Dosha and Dushyas.	**III**	6 hrs
16.	14. Dvividhopakramaniya Adhyaya- Case based learning- Find out the causative factors of Atishualya in present era (On the basis of predesigned proforma) CBL Share video clip of any patient suffering from Atikarshya- On the basis of previous learning discuss the contributing factors responsible for malnourishment. (Explore Dhatu Sneha Parampara in present context).	**III**	5 hrs
17.	15. Shodhanadigana Sangraha Adhyaya- Group Presentation- Divide the various Aushadha Vargas among students and a group will represent each varga and related practical information.	**III**	4 hrs
	Charak Samhita – Sutrasthan (1-12 Adhyaya)		
18.	CS Su 1. Deerghanjiviteeya Adhyaya- Compilation work: (based on commentry) ● Student has to write 20 terminologies with meanings referring Chakrapani commentary. Then after these terms shall be discussed in class.	I	2

19.	CS Su 2. Apamarga Tanduliya Adhyaya- Visit to Dravyaguna Department- Identify the dravyas on the basis of different karmas	**II**	3 hrs
20.	CS Su 3. Aragvadhiya Adhyaya- Group Discussion- Probable mode of action of drugs applied externally? In which form they will more absorbable? (May take help of published literature; discuss linking with Ayurveda fundamentals.) Practical demonstrations in Panchakarma unit on patients. Workshop/ demonstration of preparation of different lepas useful in different conditions.	**II**	3 hrs
21.	CS Su 4. Shadvirechana-shatashritiya Adhyaya- Practical Demonstration: Visit to Dravyaguna Department and demonstration of various Mahakashay and its uses (Integration with Dravyaguna department)	**II**	4 hrs
22.	CS Su 5. Matrashiteeya Adhyaya- Visit to Panchakarma Unit of Hospital – Demonstration of abhyanga, mardana, udvartana and other procedures to be followed in daily routine (Integration with Panchakarma Department) Group Project : Gather information about nutritive values of Nitya Sevaniya Dravyas. Assess their classical properties. Discuss why these dravyas are specially advised for regular consumption.	**II**	5 hrs
23.	CS Su 6. Tasyashiteeya Adhyaya- Documentation- Festival and rutu- Documenting the changes in the food habits and	**II**	4 hrs

	lifestyle as per the rutu with the parents and elders and also discussing on relevance of rutucharya concept with Indian festivals. Short Essay writing /Poster making- Does and don'ts to be followed according to various seasons (Refer both the Samhitas for this activity)		
24.	CS Su 7. Naveganadharaniya Adhyaya:- Vedio clip making Activity- Educating people about harms of vega dharana by social media campaigns Group Discussion- Finding reasons for vega dharana in present day lifestyle.	**II**	4 hrs
25.	CS Su 8. Indriyopakramaniya Adhyaya- Group Presentation- Sadvrutta – Interpreting relevance of different sadvrutta in present scenario. Developing new sadvruttas as per todays' lifestyle referring classics.	**II**	3 hrs
26.	CS Su 9. Khuddakachatushpada Adhyaya- Doctor Patient communication introduction, Role play. Feedback collection of chikitsa chatushpada Group activity- Collect Feedback on qualities of Vaidya from rogi and upasthata. Collect Feedback on qualities of rogi from vaidya and upasthatha Collect Feedback on qualities of upasthatha from rogi and Vaidya Collect feedback on qualities of dravya from the experts of dravyaguna and rasa shastra	**II**	3 hrs
27.	CS Su 10. Mahachatushpada Adhyaya- Developing proforma for sadhya asadhya vyadhi lakshanas-	**II**	3 hrs

	Guide students on how to prepare a proforma to assess any available parameters.		
28.	CS Su 11. Tisraishaniya Adhyaya- Debate :- Punarjanma siddhant as per different thoughts. Debate on punarjanma with different references as per classics and contemporary understanding.	**III**	5 hrs
29.	CS Su 12. Vatakalakaliya Adhyaya- Role Play (Enact sambhasha parishad) – Distribute the characters of the rishis given in chapter. And guide them with the script. Arrange a forum where these students will be doing sambhasha parishad on vata kala-akala. Decode the sutras- Students in groups will use different tools like infographics/ animation/ ppts to illustrate the normal functions of Vata Dosha explained in present chapter. (Refer Chakrapani commentary thoroughly to understand the meaning of Sanskrit shlokas). Introduction to Group Dynamics. Communication skills for Group Discussions.	**III**	5 hrs
30.	Shloka Recitation Competition- At the end of the year/ every term such competition shall organized by department.	**III**	5 hrs
31.	Ayurveda Quiz- On the basis of assigned syllabus.	**III**	5 hrs
32.	Poster making Competition / SA writing completion / Making video clips for general people to make awareness about Ayurved living.	**III**	5 hrs

Table 6: Assessment Summary

6 A- Number of Papers and Marks Distribution

S.No.	Subject Code	Papers	Theory	Practical/Clinical Assessment					Grand Total
				Practical/ Clinical	Viva	Electives	IA	Sub Total	
1.	AyUG-SA1	1	100	-	75	10 (Set-FC)	15	100	200

6 B - Scheme of Assessment (formative and Summative)

SR.NO.		PROFESSIONAL COURSE	DURATION OF PROFESSIONAL COURSE		
			First Term (1-6 Months)	Second Term (7-12 Months)	Third Term (13-18 Months)
1	AyUG-SA1	First	3 PA & First TT	3 PA & Second TT	3 PA &UE
	PA: Periodical Assessment; TT: Term Test; UE: University Examinations				

6 C - Calculation Method for Internal assessment Marks (15 Marks)

TERM	PERIODICAL ASSESSMENT*					TERM TEST**	TERM ASSESSMENT	
	A	B	C	D	E	F	G	H
	1 (15 Marks)	2 (15 Marks)	3 (15 Marks)	Average (A+B+C/3)	Converted to 15 Marks (D/15*15)	Term Test (Marks converted to 15) (15 Marks)	Sub Total _/30 Marks	Term Assessment (…./15)
FIRST							E+F	(E+F)/2
SECOND							E+F	(E+F)/2
THIRD						NIL		E
Final IA	Average of Three Term Assessment Marks as Shown in 'H' Column.							
	Maximum Marks in Parentheses *Select an Evaluation Method which is appropriate for the objectives of Topics from the Table 6 D for Periodic assessment. Conduct 15 marks assessment and enter marks in A, B, and C. ** Conduct Theory (100 Marks)(MCQ(20*1 Marks), SAQ(8*5), LAQ(4*10)) and Practical (100 Marks) Then convert to 15 marks.							

6 D - Evaluation Methods for Periodical Assessment

S. No.	Evaluation Methods
1.	**Activities Indicated in Table 3 - Column G3 as per Indicated I, II or III term in column I3.**
2.	Practical / Clinical Performance

3.	Viva Voce, MCQs, MEQ (Modified Essay Questions/Structured Questions)
4.	Open Book Test (Problem Based)
5.	Summary Writing (Research Papers/ Samhitas)
6.	Class Presentations; Work Book Maintenance
7.	Problem Based Assignment
8.	Objective Structured Clinical Examination (OSCE), Objective Structured Practical Examination (OPSE), Mini Clinical Evaluation Exercise (Mini-CEX), Direct Observation of Procedures (DOP), Case Based Discussion (CBD)
9.	Extra-curricular Activities, (Social Work, Public Awareness, Surveillance Activities, Sports or Other Activities which may be decided by the department).
10.	Small Project

6 E - Paper Layout

I PROFESSIONAL BAMS EXAMINATIONS

AyUG-SA1

Time: 3 Maximum Marks: 100

INSTRUCTIONS: All questions compulsory

TOTAL MARKS 100

		Number of Questions	Marks per question	Total Marks
Q 1	Multiple Choice Questions (MCQ)	20	1	20
Q 2	Short answer questions (SAQ)	8	5	40
Q 3	Long answer questions (LAQ)	4	10	40
				100

6 F - Disribution of Theory Exam

	AyUG-SA1			**D** **Type of Questions** **"Yes" can be asked.** **"No" should not be asked.**		
	A **List of Topics**	**B** **Term**	**C** **Marks**	**MCQ** **(1 Mark)**	**SAQ** **(5 Marks)**	**LAQ** **(10 Marks)**
1.	Introduction to Samhita-	**1**		No	/NO	NO
Ashtang Hriday Samhita - Sutrasthan (1-15 Adhyaya) 50 marks						
2.	AH Su.1. Ayushkamiya Adhyaya	**1**	50	YES	YES	YES

3.	AH Su.2. Dinacharya Adhyaya	**1**		YES	YES	YES
4.	AH Su.3. Rutucarya Adhyaya	**1**		YES	YES	YES
5.	AH Su.4. Roganutpadaniya Adhyaya	**I**		YES	YES	YES
6.	AH Su.5. Dravadravya Vijnaniya Adhyaya	**I**		NO	YES	NO
7.	AH Su.6. Annaswaroopa Vijnaneeya Adhyaya	**II**		NO	YES	NO
8.	AH Su.7. Annaraksha Adhyaya	**II**		NO	YES	NO
9.	AH Su.8. Matrashitiya Adhyaya	**II**		YES	YES	YES
10.	AH Su.9. Dravyaadi Vijnaniya Adhyaya	**II**		YES	YES	YES
11.	AH Su.10.Rasabhediya Adhyaya	**II**		YES	YES	YES
12.	AH Su.11.Doshadi Vijnaniya Adhyaya	**III**		YES	YES	YES
13.	AH Su.12.Doshabhediya Adhyaya	**III**		YES	YES	YES
14.	AH Su.13.Doshopakramaniya Adhyaya	**III**		YES	YES	YES
15.	AH Su.14.Dvividhopakramaniya Adhyaya	**III**		YES	YES	YES
16.	AH Su.15.Shodhanadigana Sangraha Adhyaya	**III**		NO	NO	NO
Charak Samhita – Sutrasthan (1-12 Adhyaya):						
17.	CS S 1. Deerghanjiviteeya Adhyaya-	1		YES	YES	YES
18.	CS S 2. Apamarga Tanduliya Adhyaya-	II		NO	YES	NO
19.	CS S 3. Aragvadhiya Adhyaya-	II		NO	YES	NO
20.	CS S 4. Shadvirechana-shatashritiya Adhyaya-	II		NO	YES	NO
21.	CS S 5. Matrashiteeya Adhyaya-	II		YES	YES	YES
22.	CS S 6. Tasyashiteeya Adhyaya-	II	**50**	YES	YES	YES
23.	CS S 7. Naveganadharaniya Adhyaya-	II		YES	YES	YES
24.	CS S 8. Indriyopakramaniya Adhyaya-	II		YES	YES	YES
25.	CS S 9. Khuddakachatushpada Adhyaya-	II		YES	YES	YES
26.	S 10. Mahachatushpada Adhyaya-	II		YES	YES	YES
27.	S 11. Tisraishaniya Adhyaya-	III		YES	YES	YES
28.	S 12. Vatakalakaliya Adhyaya-	III		YES	YES	YES

6 G - Question paper blue print

A **Question Sr. No**	**B** **Type of Question**	**C** **Question Paper Format** **50 marks AH/S** **50 Marks CS/S**
.Q1	**Multiple choice Questions**	1. Topic number 2 (A.H.Su.Ch.1)

	(MCQ) 20 Questions 1 mark each All compulsory From Must know part 15 MCQ From Desirable to know 3 MCQ From Nice to know 2 MCQ	2. Topic number 3 (A.H.Su.Ch.2) 3. Topic number 4 (A.H.Su.Ch.3) 4. Topic number 5 (A.H.Su.Ch.4) 5. Topic number 9 (A.H.Su.Ch.8) 6. Topic number 10 (A.H.Su.Ch.9) 7. Topic number 11 (A.H.Su.Ch.10) 8. Topic number 12 (A.H.Su.Ch.11) 9. Topic number 13 (A.H.Su.Ch.12) 10. Topic number 14 (A.H.Su.Ch.13) 11. Topic number 15 (A.H.Su.Ch.14) 12. Topic number 17 (C.S.Su.Ch.1) 13. Topic number 21 (C.S.Su.Ch.5) 14. Topic number 22 (C.S.Su.Ch.6) 15. Topic number 23 (C.S.Su.Ch.7) 16. Topic number 24 (C.S.Su.Ch.8) 17. Topic number 25 (C.S.Su.Ch.9) 18. Topic number 26 (C.S.Su.Ch.10) 19. Topic number 27 (C.S.Su.Ch.11) 20. Topic number 28 (C.S.Su.Ch.12)
Q2	**Short answer Questions (SAQ)** Eight Questions 5 Marks Each All compulsory Must know 7, Desirable to know 1 No Questions on Nice to know	1. Topic no. 2 (A.H.Su.Ch.1) / Topic no. 25 (C.S.Su.Ch.9)/ Topic number 26 (C.S.Su.Ch.10) 2. Topic no. 3(A.H.Su.Ch.2) / Topic no. 9(A.H.Su.Ch.8) / Topic no. 21(C.S.Su.Ch.5) / Topic no. 24 (C.S.Su.Ch.8) 3. Topic no. 4 (A.H.Su.Ch.3) / Topic no. 22 (C.S.Su.Ch.6) / Topic no. 5 (A.H.Su.Ch.4) / Topic no. 23 (C.S.Su.Ch.7)/ 4. Topic no. 12 (A.H.Su.Ch.11) / Topic no. 13 (A.H.Su.Ch.12)/ Topic no.28 (C.S.Su.Ch.12) 5. Topic no. 17 (C.S.Su.Ch.1) 6. Topic no. 6 (A.H.Su.Ch.5)/ Topic no.7 (A.H.Su.Ch.6)/ Topic no.18 (C.S.Su.Ch.2)/ Topic no.19 (C.S.Su.Ch.3) / Topic no.20 (C.S.Su.Ch.04) / Topic no.16 (A.H.Su.Ch.15) 7. Topic no.8 (A.H.Su.Ch.7) /Topic no. 10 (A.H.Su.Ch.9) / Topic no.11 (A.H.Su.Ch.10)/ 8. Topic no. 14 (A.H.Su.Ch.13) Topic no.15 (A.H.Su.Ch.14)/ Topic no. 27 (C.S.Su.Ch.11)
Q3	**Long answer Questions (LAQ)** Four Questions 10 marks each All compulsory	1. Topic no. 2 (A.H.Su.Ch.1) / Topic no. 17 (C.S.Su.Ch.1)/ Topic no. 25 (C.S.Su.Ch.9)/ Topic number 26 (C.S.Su.Ch.10) 2. Topic no.3(A.H.Su.Ch.2) / Topic no. 4 (A.H.Su.Ch.3)/ Topic no. 21(C.S.Su.Ch.5) / Topic no. 22 (C.S.Su.Ch.6)

	All questions on Must to know. No Questions on Nice to know and Desirable to know	3. Topic no. 12 (A.H.Su.Ch.11) / Topic no. 13 (A.H.Su.Ch.12)/ Topic no. 14 (A.H.Su.Ch.13)/ Topic no.15 (A.H.Su.Ch.14) / Topic no.28 (C.S.Su.Ch.12) 4. Topic no. 9(A.H.Su.Ch.8)/ Topic no. 10 (A.H.Su.Ch.9) / Topic no.11 (A.H.Su.Ch.10)/ Topic no. 27 (C.S.Su.Ch.11)/ Topic no.5 (A.H.Su.Ch.4)/ Topic no. 23 (C.S.Su.Ch.7)

6 H - Distribution of Practical Exam

Practical 100 Marks – (Viva 75 + Elective 10 (Set-FC) + IA 15) Marks

SN		**Heads**	Marks
A		**Viva (75 Marks)**	
	1	Viva on Record Book (of yearly conducted non lecture activities) (Refer Table 5)	15
	2	Viva on Shloka Book and Shloka Recitation (Ref table 3. Recitation)	10
	3	Identification of Tantrayukti Viva on .Introduction to Samhita (ref Table 2: 1)	15
	4	Viva Voce on AH	15
	5	Viva Voce on Ch Su	15
	6	Communication Skill	05
B		**Internal Assessment**	15
C		**Electives**	10
	Total Marks		**100**

7. Reference books/Resourses

- **Introduction to Samhita**

1. Ashtanghridayam with the commentaries ‘Sarvangasundara’ of Arundatta and ‘Ayurvedarasayana’ of Hemadri, Collated by Dr. Anna Moreshwar Kunte and Krishna Ramchandra Shastri Navre
2. Sushruta Samhita by Dr. Ambikadutta Shastri
3. Ayurvedeeya Padartha Vijnaan by Prof. C. R. Agnivesh
4. Ayurvedeeya Padartha Vijnaan and Ayurvedeeya itihaasam by Prof. C. R. Agnivesh
5. Ayurvediya Padarth Vidnyan by Vd. Ranjit Rai Desai
6. History of Medicine in India by Aacharya Priyavrat Sharma
7. History of Indian Medicine by J. Jolly

- **Ashtang Hridaya**

1. Ashtanghridayam with the commentaries ‘Sarvangasundara’ of Arundatta and ‘Ayurvedarasayana’ of Hemadri, Collated by Dr. Anna Moreshwar Kunte and Krishna Ramchandra Shastri Navre
2. Ashtanga Hridaya : English commentary by Dr. T. Shreekumar
3. Ashtanga Hridaya : English commentary by Dr. Vishwavasu Gaur
4. Ashtang Hridayam : English translation by Prof. K.R. Srikantha Murthy
5. Ashtanga Hridaya –English translation by Vd. Anantram Shastri
6. Ashtanga Hridayam by Dr. B. Ramarao
7. Illustrated Ashtanga Hridaya text with English Translation by Dr. R. Vidyanath
8. Ashtanga Hridaya: Hindi commentary by Lalchanda Vaidya
9. Ashtanga Hridaya: Hindi commentary by Vd. B.L.Gaur

- **Charak Samhita**

1. Charakasamhita by Agnivesha Revised by Charaka and Dridhbala with the Ayurveda Dipika commentary of Chakrapanidatta Edited by Vaidya Yadavji Trikamji Acharya
2. Charak Samhita (English Commentary): Dr. Ram Karan Sharma and Vd. Bhagwan Dash or Aacharya Priyavrata Sharma
3. Charak Samhita with translation of Chakrapani commentary by Harishchandra Kushvaha
4. Charak Samhita by Aacharya P.V.Sharma
5. Charak Samhita (Hindi commentary): Vaidya Jayadev Vidyalankar
6. Charak Samhita (Hindi commentary): Vaidya Atridev Vidyalankar
7. Charak Samhita (Hindi commentary): Prof. Gorakhanath Chaturvedi and Kashinath Shastri
8. Charak Samhita (Hindi commentary): Dr. Brahmanand Tripathi
9. Charak Samhita (Hindi commentary): Dr. Ravidatta Tripathi
10. Charaka Samhita –Ayurveda Dipika Commentary- Hindi translation by Dr. B.L.Gaur
11. Legacy of Charak – M S Valiathan
12. Charak e-Samhita –National Institute of Indian Medical Heritage – http://niimh.nic.in/ebooks/ecaraka
13. Charakasamhitaonline.com- Charak Samhita New Edition (carakasamhitaonline.com)

Course curriculum for Second Professional BAMS

(PRESCRIBED BY NCISM)



Dravyaguna Vigyan

(SUBJECT CODE : AyUG-DG)

(Applicable from 2021-22 batch, from the academic year 2023-24 onwards for 5 years or until further notification by NCISM, whichever is earlier)

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।। आयुषे सर्वलोकानाम् ।।

SCAN ME

DG

BOARD OF AYURVEDA
NATIONAL COMMISSION FOR INDIAN SYSTEM OF MEDICINE
NEW DELHI-110058

भारतीय चिकित्सा पद्धति राष्ट्रीय आयोग
आयुष मंत्रालय, भारत सरकार
कार्यालय: टी–19, पहली और दूसरी मंजिल, ब्लॉक–IV, धन्वन्तरि भवन,
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क्रमांक/ Ref. No BOA/Syllabus/31/2/2024 **दिनांक/Dated. 01.01.2025**

To,

The Registrars of the universities having Ayurveda colleges
Directors/ Deans/Principals of all Ayurveda colleges

Subject: - Information about Changes/Corrections in the 2nd Professional Syllabus of – Rognidana Vikruti vigyan, Swasthvritta & Yoga, and Dravyaguna Subjects- reg.

Dear Sir/Madam,

With reference to the subject mentioned above, you are hereby informed to implement the corrections in the below mentioned curriculum for the Second Professional BAMS subjects:

- **Roga Nidan evam Vikriti Vigyan**
- **Swasthavritta evam Yoga**
- **Dravyaguna Vigyan**

Kindly circulate the same to the concerned for implementation.

Enclosure: - As above

Dr. B.S Prasad
President, BOA, NCISM

डॉ. श्रीनिवास प्रसाद बुदरु
अध्यक्ष, आयुर्वेद बोर्ड
President, Board of Ayurveda
भारतीय चिकित्सा पद्धति राष्ट्रीय आयोग
National Commission for Indian System of Medicine
पंजाबी बाग (पश्चिम), नई दिल्ली-110026
Punjabi Bagh (West), New Delhi-110026

Copy to: -

1. Chairperson, National Commission for Indian System of Medicine, New Delhi-110026.
2. Guard file.

Dr. B.S Prasad
President, BOA, NCISM

Corrigendum

COURSE CURRICULUM FOR SECOND PROFESSIONAL BAMS

(PRESCRIBED BY NCISM)

Dravyaguna Vigyan

(SUBJECT CODE: AyUG-DG)

Corrections for implementation:

Apply the corrections as detailed below				
Page no	**Table no**	**Point number**	**Existing Text**	**Corrected Text**
43	4	16	Systoscope	Cytoscape software
63	6F	11	MCQ yes	MCQ no
64	6F	23	SAQ no	SAQ yes
64	6F	23	MCQ yes	MCQ no

- **Replace table 6 G with the below mentioned table-**

Corrected Table- 6G (Blue Print of Paper I & II)

Syllabus points for framing of question paper			
Type of question	**Sr.No.**	**Syllabus point as per Table-6F**	**Title of the topic**
PAPER-I			
MCQ-Multiple choice Questions 20 Questions 1 mark each All compulsory	1	1	Dravyaguna Vigyana
	2	2	Dravya
	3	3	Guna
	4	4	Rasa
	5	5	Vipaka
	6	6	Virya
	7	8	Interrelation of Rasa-Guna-Virya-Vipaka-Prabhava
	8	9	Karma
		12	Mishraka Gana
	9	12	Mishraka Gana
	10	13	Nomenclature of dravya as per Nighantu, Vedic taxonomy and Botany
	11	14	Prashasta Bheshaja, Bheshaja Pariksha and drug evaluation method with correlation as per Pharmacognosy
	12	15	Dravyasangrahana and Drug collection methods as per GFCP (Good Field collection practices)
	13	16	GCP (Good cultivation practices), seed bank, conservation of medicinal plants, knowledge about RET (Rear, Endangered & Threatened) medicinal plants.
	14	17	Abhava Pratinidhi Dravya (substitutes)
	15	18	Classifications and techniques of aqueous and alcoholic extracts
	16	19	Adverse drug reaction and Pharmacovigilance with recent updates
	17	20	NMPB (National Medicinal Plant Board),

Corrigendum

			CCRAS (Central Council of Research in Ayurveda Sciences), API (Ayurvedic Pharmacopeia of India), GCTM (Global Centre for Traditional Medicine), PCIMH (Pharmacopeia Commission of Indian Medicine and Homeopathy)
	18	21	Vrikshayurveda and Ethno-medicine
	19	22	Network pharmacology and Bioinformatics
	20		
SAQ-Short Answer Questions: Eight Questions (5 Marks Each) All Compulsory	1	2	Dravya
	2	5	Vipaka
	3	6	Virya
	4	7	Prabhava
	5	10	Karmas of Dashemani Gana
	6	11	Principles of General Pharmacology
	7	11	Principles of General Pharmacology
	8	12	Mishraka Gana
Long answer Questions: Four Questions (10 marks each) All compulsory	1	3	Guna
	2	4	Rasa
	3	9	Karma
	4	11	Principles of General Pharmacology
PAPER-II			
MCQ-Multiple Choice Questions: 20 Questions (1 mark each) All compulsory	1 - 10	24	Dravya (Drug) Nama-Guna-Karma Jnana (10 MCQs from the content of 24th point syllabus)
	11 - 20	25	Dravya (Drug) Nama-Guna-Karma Jnana (10 MCQs from the content of 25th point syllabus)
SAQ-Short Answer Questions: Eight Questions (5 Marks Each) all compulsory	1	23	Bheshajavacharaniya (Criteria's to be considered for selection of drugs in vyadhis)
	2 - 6	24	Dravya (Drug) Nama-Guna-Karma Jnana (5 SAQs from the content of 24th point syllabus)
	7 - 8	25	Dravya (Drugs) Nama -Guna-Karma- Jnana (2 SAQs from the content of 25th point syllabus)
Long answer Questions: Four Questions (10 marks each) All compulsory	1 - 2	24	Dravya (Drug) Nama-Guna-Karma Jnana (2 LAQs from 24th point of syllabus)
	3 - 4	25	Dravya (Drugs) Nama -Guna-Karma- Jnana (2 LAQs from 25th point of syllabus)

Corrigendum

NCISM

II Professional Ayurvedacharya (BAMS)

Subject Code : AyUG-DG

Summary

Total number of Teaching hours: 400			
Lecture hours(LH)-Theory		150	150(LH)
Paper I	75		
Paper II	75		
Non Lecture hours(NLH)-Theory		250	250(NLH)
Paper I & II	75		
Non Lecture hours(NLH)-Practical			
Paper I & II	175		

Examination (Papers & Mark Distribution)					
Item	**Theory Component Marks**	**Practical Component Marks**			
		Practical	**Viva**	**Elective**	**IA**
Paper I	100	100	70	-	30
Paper II	100				
Sub-Total	200	200			
Total marks	400				

Important Note:-The User Manual II BAMS is a valuable resource that provides comprehensive details about the curriculum file. It will help you understand and implement the curriculum. Please read the User Manual II before reading this curriculum file. The curriculum file has been thoroughly reviewed and verified for accuracy. However, if you find any discrepancies, please note that the contents related to the MSE should be considered authentic.
In case of difficulty and questions regarding curriculum write to cur.imp@ncismindia.org

PREFACE

The Bachelor of Ayurveda education shall produce graduates having profound knowledge of Ashtanga Ayurveda. One of the chatushpada has been mentioned is Dravya. The revised syllabus of Dravyaguna along with the contemporary advances supplemented with knowledge of scientific and technological advances in Dravyaguna along with extensive practical training

Fundamentals of Dravyaguna involves a thorough knowledge of various principles and concepts of Rasapanchaka (fivefold analysis of medicinal substances) and Karma (pharmacological action). It refers to classical Ayurvedic texts, provides suitable examples, and includes contemporary interpretations to facilitate better understanding.Most commonly used dravyas by clinicians are included in curriculum.

The current syllabus focuses greater emphasis on understanding the fundamentals with a scientific interpretation and clinical application. The repetitive topics such as Ahara varga, Nighantu, and Jangama dravyas is avoided since they are covered in Samhita adhyayana (study of classical texts), Itihasa (history), and ethical considerations related to the clinical use of animal-origin drugs.

Additionally, newer areas in Ayurveda related to medicinal plants, such as cultivation techniques, collection methods, and various regulatory guidelines from organizations like NMPB (National Medicinal Plants Board), CCRAS (Central Council for Research in Ayurvedic Sciences), API (Ayurvedic Pharmacopoeia of India), GCTM (Global Centre for Traditional Medicine), PCIMH (Pharmacopoeia Commission for Indian Medicine & Homoeopathy), pharmacovigilance, Vrikshayurveda (science of plant life), Ethno medicine, Network pharmacology, and Bioinformatics, have been incorporated. This information is crucial for the sustainable use of medicinal plants and a better understanding of their properties.

Practical sessions in Dravyaguna focus on understanding fundamental concepts such as Mahabhuta (five elements), Guna (properties), Rasa (taste), and Virya (potency) with Parameters commonly used in physicochemical analysis.The curriculum also addresses challenges faced by the herbal drug industry, including the issue of adulteration, by incorporating quality check parameters. Furthermore, the students gain practical experience in plant identification through visits to various natural and cultivated plant habitats.

The revised curriculum for Dravyaguna reflects commitment to equipping students with the knowledge and skills necessary to excel in the field of Ayurvedic pharmacology. Hope that this curriculum will inspire and empower students to become proficient Ayurvedic practitioners who can contribute to the holistic well-being of individuals and society as a whole.

INDEX

Course Code and Name of Course 5
Table 1- Course learning outcomes and matched PO 5
Table 2 : Contents of Course 6
Paper 1 6
Paper 2 10
Table 3: Learning objectives (Theory) of Course 14
Paper 1 14
Paper 2 31
List of Practicals 34
Table 4: Learning objectives (Practical) 35
Practical 1 35
Table 4a: List of Practical 45
Activity 51
Table 5- Teaching learning method 58
Table 6: Assessment Summary: Assessment is subdivided in A to H points 59
6 A-Number of Papers and Marks Distribution 59
6 B - Scheme of Assessment (formative and Summative) 60
6 C - Calculation Method for Internal assessment Marks 61
6 D - Evaluation Methods for Periodical Assessment 61
6 E Question Paper Pattern 62
6 F Distribution of theory examination 63
Paper 1 63
Paper 2 64
6 G Blue print of paper I & II 66
6 H Distribution of Practical Exam 69
References Books/ Resources 71
Abbreviations 76

Course Code and Name of Course

Course code	Name of Course
AyUG-DG	Dravyaguna Vigyan

Table 1- Course learning outcomes and matched PO

SR1 CO No	A1 Course learning Outcomes (CO) AyUG-DG At the end of the course AyUG-DG, the students should be able to-	B1 Course learning Outcomes matched with program learning outcomes.
CO1	Demonstrate the application of principles of *Dravyaguna* in clinical practice.	PO1,PO2,PO8
CO2	Analyze and justify the fundamental principles of *Dravyaguna* in relevance to contemporary sciences.	PO1
CO3	Analyze and interpret *Rasa Panchaka* of *Dravya* with their application in clinical practice.	PO5,PO9
CO4	Interrelate the knowledge on Karma (pharmacological actions) with *Rasa panchaka* and basic contemporary clinical pharmacology.	PO2
CO5	Demonstrate and Justify the ability to select the specific *Dravyas*, Prashata Bheshaja with different dosage forms in different clinical conditions.	PO3,PO7,PO9
CO6	Demonstrate knowledge of quality control methods of drug.	PO3
CO7	Demonstrate knowledge and skills about *Apamishrana* (adulterants), *Abhava pratinidhidravya* (substitutes), *Prashastabheshaja* (ideal drug) and plant extracts.	PO5,PO6
CO8	Identify the medicinal plants and orient about conservation, cultivation, sustainable utilization & Pharmacovigilance	PO4,PO6
CO9	Demonstrate fundamental principles of applied Pharmacology.	PO2

Table 2 : Contents of Course

Paper 1 Fundamental Dravyaguna					
Sr. No	**A2 List of Topics**	**B2 Term**	**C2 Marks**	**D2 Lecture hours**	**E2 Non-Lecture hours**
1	**1.Dravyaguna Vigyana**	1	1	1	1
2	**2.Dravya** • 2.1 Panchabhoutikatwa of Dravya • 2.2 Classification of Dravya based on Utpattibheda,Yonibheda, Prayogabheda, Prabhavbheda, Doshaghnabheda, Rasabheda and Karmbheda	1	6	5	4
3	**3. Guna** • 3.1 Panchabhoutikatva, characteristics and classification • 3.2 Gurvadiguna and its karma on Dosha, Dhatu and Mala, clinical application and research updates • 3.3 Paradiguna with examples, clinical applications and research updates	1	11	4	2
4	**4. Rasa** • 4.1 Meaning of “Rasa” in various contexts • 4.2 Shadrasa in relative correlation with taste of chemical constituents • 4.3 Rasotpatti and Panchabhoutika constitution of Shadrasa • 4.4 Rasopalabdhi and pathway of taste perception & sites of taste receptors in the body • 4.5 Rasa -Lakshana, Guna & Karmas of each Rasa on Dosha, Dhatu and Mala • 4.6 Atiyogalakshana, • 4.7 Clinical application and Research updates of Shadrasa • 4.8 Anurasa • 4.9 Rasa Sevanakrama of Aushadha	1	11	7	4

5	**5. Vipaka** • 5.1 Trividha Vipaka • 5.2 Vipak karma on Dosha, Dhatu and Mala • 5.3 Clinical application and Research updates • 5.4 Vipakopalabdhi (Determination of Vipaka) & Taratamya (Degree of variation)	1	6	3	1
6	**6. Virya** • 6.1 Difference between Guna and Virya • 6.2 Karmas of Virya on Dosha, Dhatu and Mala • 6.3 Clinical application and Research updates • 6.4 Viryaopalabdhi (Determination of Virya) and understanding of Virya with respect to actions of active constituents	1	6	2	2
7	**7. Prabhava** • 7.1 Samanapratyayarabdha and Vichitrapratyayarabdha • 7.2 Clinical application of Prabhava and Research updates	1	5	2	1
8	**8. Interrelation of Rasa-Guna-Virya-Vipaka-Prabhava** • Interrelation of Rasa-Guna-Virya-Vipaka-Prabhava with respect to their strength- Pharmacodynamics	1	1	1	2
9	**9. Karma** • **9. Individual Karma, correlation with contemporary pharmacological action, examples, clinical application and research updates** • 9.1 Deepana • 9.2 Pachana	1	11	9	5

	• 9.3 Samshodhana • 9.4 Samshamana • 9.5 Anulomana • 9.6 Sransana • 9.7 Bhedana • 9.8 Rechana • 9.9 Chhedana • 9.10 Lekhana • 9.11 Grahi • 9.12 Sthambhana • 9.13 Madakari • 9.14 Pramathi • 9.15 Abhishyandi • 9.16 Vyavayi • 9.17 Vikashi • 9.18 Rasayana • 9.19 Vajeekarana • 9.20 Medhya				
10	**10. Karmas of Dashemani Gana**	1	5	12	3
11	**11. Principles of General Pharmacology** • **11 Drug definition, drug dosage forms, route of drug administration, pharmacokinetics (ADME), pharmacodynamics, Drug dose, principles of drug action, mechanism of drug action & bio-availability** • **11.1 Drugs Acting on Central Nervous System:** Anaesthetics, Sedative Hypnotics, Antiepileptics, Antiparkinsonian, Antidepressants, Antianxiety Drugs, Opioid - Analgesics Drugs • **11.2 Drugs Acting on Peripheral (somatic) Nervous System: Skeletal Muscle Relaxants, Local Anaesthetics** • **11.3 Autacoids and Related Drugs:** Nonsteroidal, Anti-inflammatory (NSAIDs)/Antipyretic and Analgesics Drugs • **11.4 Drugs for Respiratory Disorders:**Bronchodilators, Aerosols/ Inhalants Expectorants, Antitussive Drugs • **11.5 Cardiovascular Drugs:** Antihypertensive, Antianginal Drugs • **11.6 Drugs Acting on Kidney:** Diuretics • **11.7 Drugs Affecting Blood:** Haematinics, Coagulants, Anticoagulants, Hypolipidaemic Drugs	3	20	15	1

	• **11.8 Gastrointestinal Drugs:** Antacid, Carminatives, Digestants, Antiemetics, Laxatives, Antidiarrhoeal, Hepatoprotective Drugs • **11.9 Antibacterial Drugs:** Antibiotics, Antitubercular Drugs • **11.10 Antifungal, Antiviral, Antimalarial and Antihelmintic Drugs** • **11.11 Hormones and Related Drugs:** Thyroid Hormone, Thyroid Inhibitors, Insulin, Oral Anti-diabetic, Hormonal Contraceptives, Uterine Stimulants, Uterine Relaxants Drugs • **11.12 Miscellaneous Drugs:** Antiseptics and Disinfectants, Vaccines, Vitamins, Water imbalance and IV fluids				
12	**12. Mishraka Gana** • **12. Mishrakagana: its composition, guna karma and therapeutic uses.** • **12.1 Brihatpanchamoola.** • **12.2 Laghupanchamoola.** • **12.3 Vallipanchamoola.** • **12.4 Kantakapanchamoola.** • **12.5 Trinapanchamoola.** • **12.6 Panchavalkala.** • **12.7 Triphala.** • **12.8 Trikatu.** • **12.9 Trimada.** • **12.10 Chaturusana.** • **12.11 Panchakola.** • **12.12 Shadusana** • **12.13 Chaturbeeja.** • **12.14 Trijataka.** • **12.15 Chaturajataka.** • **12.16 Panchatikta.** • **12.17 Chaturbhadra.** • **12.18 Trikarshika.**	3	6	6	2
13	**13. Nomenclature of dravya as per Nighantu, Vedic taxonomy and Botany**	3	1	0	2
14	**14. Prashasta Bheshaja, Bheshaja Pariksha and drug evaluation method with correlation as per Pharmacognosy**	3	1	1	2

15	**15. Dravyasangrahana and Drug collection methods as per GFCP (Good Field collection practices)**	3	1	1	0
16	**16. GCP (Good cultivation practices), seed bank, conservation of medicinal plants, knowledge about RET (Rear, Endangered & Threatened) medicinal plants.**	3	1	1	0
17	**17. Abhava Pratinidhi Dravya (substitutes)**	3	1	1	1
18	**18. Classifications and techniques of aqueous and alcoholic extracts**	3	1	0	2
19	**19. Adverse drug reaction and Pharmacovigilance with recent updates**	3	1	1	2
20	**20. NMPB (National Medicinal Plant Board), CCRAS (Central Council of Research in Ayurveda Sciences), API (Ayurvedic Pharmacopeia of India), GCTM (Global Centre for Traditional Medicine), PCIMH (Pharmacopeia Commission of Indian Medicine and Homeopathy)**	3	1	1	0
21	**21. Vrikshayurveda and Ethno-medicine**	3	1	1	1
22	**22. Network pharmacology and Bioinformatics**	3	2	1	1
Total Marks			**100**	**75 hr**	**39 hr**

Paper 2 Applied Dravyaguna					
Sr. No	**A2 List of Topics**	**B2 Term**	**C2 Marks**	**D2 Lecture hours**	**E2 Non-Lecture hours**
23	**1. Bheshajavacharaniya (Criteria's to be considered for selection of drugs in vyadhis)**	2	5	1	6
24	**2.1 Dravya (Drug) Nama-Guna-Karma Jnana**	2	55	45	10

	• Amalaki • Aragwadha • Arjuna • Ashoka • Ashwagandha • Ativisha • Bala • Beejaka • Bhallataka • Bharangi • Bhrungaraja • Bhumyamalaki • Bilva • Brahmi • Chandana • Chitraka • Dadima • Dhataki • Dhamasa • Eranda • Gokshura • Guduchi • Guggulu • Haridra • Haritaki • Hingu • Jambu • Jatamansi • Jyotishmati • Kanchanara • Kantakari • Kapikachhu • Karkatshrungi • Katuki • Khadira • Kumari • Kutaja • Latakaranja • Lodhra • Agnimanth • Ahiphena (NK) • Ajamoda *(DK)* • Apamarga (DK) • Asthishrunkhala • Bakuchi • Bruhati • Chakramarda • Dhanyaka • Ela • Gambhari					

	• Japa • Jatiphala • Jeeraka (DK) • Kalamegha • Kampillaka • Kulatha *(NK)* • Kumkum • Lajjalu • Lavanga				
25	**2.2 Dravya (Drugs) Nama -Guna-Karma-Jnana** • Madanphala • Mandukaparni • Manjishta • Maricha • Meshashrungi • Methika • Musta • Nagkeshar • Nimba • Nirgundi • Palasha • Pashanabheda • Patha • Pippali • Punarnava • Rasna • Rasona • Sarapagandha • Sairayak • Sariva • Shallaki • Shalmali(Mocharasa) • Shankhapushpi • Shatavari • Shigru • Shunthi • Talisapatra *(NK)* • Trivrut • Tulasi • Twak • Usheera • Vacha • Varuna • Vasa • Vatsanabha	3	40	29	20

	• Vibhitaki • Vidanga • Yashtimadhu				
Total Marks			**100**	**75 hr**	**36 hr**

Table 3: Learning objectives (Theory) of Course

Paper 1 Fundamental Dravyaguna									
A3 Course outcome	**B3** Learning Objective (At the end of the session, the students should be able to)	**C3** Domain/sub	**D3** Must to know / desirable to know / Nice to know	**E3** Level Does/ Shows how/ Knows how/ Know	**F3** T-L method	**G3** Assessment (Refer abbreviations)	**H3** Formative/ summative	**I3** Term	**J3** Integration
Topic 1 1.Dravyaguna Vigyana (Lecture :1 hours, Non lecture: 1 hours)									
CO1,CO3	Define Dravyaguna Vigyana.	CK	MK	K	L&PPT	P-VIVA	F&S	I	
CO1,CO3	Explain the role of Dravyaguna Vigyana in clinical practice.	CC	MK	KH	L&GD	P-VIVA,C-INT	F&S	I	
Topic 2 2.Dravya (Lecture :5 hours, Non lecture: 4 hours)									
CO1,CO5,CO8	Classify Dravya based on Utpatti,Yonibheda, Prayogabheda & Prabhavbheda.	CK	MK	K	L&PPT,LS	T-OBT,P-VIVA,P-POS	F&S	I	
CO1,CO5,CO8	Classify Dravya based on Doshaghnabheda, Rasabheda, Karmbheda (Dashemani & Sushrutokta Gana)	CK	MK	K	L&PPT,LS	T-OBT,P-VIVA,P-POS	F&S	I	
CO1,CO3	Describe Panchabhoutikatwa of Dravya.	CC	MK	KH	DIS,PER	T- EW,T-OBT,P-VIVA	F&S	I	
Topic 3 3. Guna (Lecture :4 hours, Non lecture: 2 hours)									

CO1,CO2,CO 3	Define Guna and describe its Panchabhoutikatva.	CK	MK	K	L&PPT,DIS,LS	T- EW,P-VIVA,PRN,QZ	F&S	I	
CO1	State characteristics of Gurvadi Guna.	CK	MK	K	L&PPT,SDL	P-VIVA,PRN,QZ	F&S	I	
CO1,CO2,CO 3	Discuss Gurvadiguna in context to its Karma on Dosha, Dhatu and Mala with examples.	CC	MK	KH	L&PPT,L&GD,FC	T- EW,P-VIVA,PRN,OSPE	F&S	I	
CO1,CO2,CO 3	Enumarate & Summarize, clinical application of Gurvadi Guna with research updates.	CC	MK	KH	L&GD,BL,LS	T- EW,P-VIVA,PRN	F&S	I	
CO1,CO2,CO 3	Enlist Paradiguna with examples.	CK	MK	K	L&GD,PER	T-EMI,P-VIVA,PRN,P-POS	F&S	I	
CO1,CO2,CO 3	Interpret clinical applications of Paradiguna.	CAP	MK	KH	L&PPT,DIS	T-EMI,P-VIVA,PRN,QZ	F&S	I	
CO1,CO2,CO 3	Discuss research updates of Paradiguna.	CC	MK	KH	L,TPW,LS	T-EMI,P-VIVA,PRN,CR-RED	F&S	I	
Topic 4 4. Rasa (Lecture :7 hours, Non lecture: 4 hours)									
CO1,CO2,CO 3	Define Rasa and interpret Meaning of “Rasa” in various contexts.	CK	MK	K	L&GD	P-VIVA,PUZ,M-CHT,INT	F&S	I	
CO1,CO2	Classify and compare shadarasa in relative correlation with taste of chemical constituents.	CK	MK	K	L&PPT,ED	P-VIVA,PUZ,M-CHT,INT	F&S	I	

					U				
CO1,CO2	State Rasa Utpatti and Panchabhoutika constitution of Shadrasa.	CK	MK	K	L&GD,PER	P-VIVA,PUZ,M-CHT,INT	F&S	I	
CO1,CO2	Discuss Rasopalabdhi.	CC	MK	KH	L&GD,SDL	P-VIVA,PUZ,M-CHT,INT	F&S	I	
CO1,CO2,CO3	Interpret pathway of taste perception & sites of taste receptors in the body	CC	MK	KH	L&PPT,L_VC	T- EW,T-OBT,P-VIVA,PRN,PUZ,INT	F&S	I	
CO1,CO2	Describe Guna and Lakshana of each Rasa.	CC	MK	KH	L&PPT	T-EMI,T- EW,P-VIVA,PRN,INT	F&S	I	
CO1,CO2	Explain karma of each rasa on Dosha, Dhatu and Mala with examples.	CC	MK	KH	L&PPT,BS	T-EMI,T- EW,P-VIVA,PUZ,M-CHT,INT	F&S	I	
CO1,CO2	Discuss Atiyoga of each rasa.	CC	MK	KH	L&PPT,PBL,PER	T-EMI,P-VIVA,PRN,PUZ,INT	F&S	I	
CO1,CO2,CO3	Interpret Clinical application of each rasa.	CAP	MK	KH	L&PPT,DIS,SDL,LS	T-EMI,T- EW,T-OBT,P-VIVA,INT	F&S	I	
CO1,CO2	Discuss research updates of Shadrasa.	CC	MK	KH	DIS,SDL,LS	T- EW,P-VIVA,PUZ,INT,CR-RED	F&S	I	

CO1,CO2	Define Anurasa.	CK	MK	K	L,LS	T-EMI,P-VIVA,INT	F&S	I	
CO1,CO2	Interpret relevance of Anurarasa in clinical practice.	CAP	MK	KH	L&GD,FC	T-EMI,P-VIVA,PUZ,INT	F&S	I	
CO1,CO2	Describe with justification Rasa sevanakrama as Aushadha.	CC	MK	KH	L&PPT,DIS	T-EMI,T- EW,P-VIVA,PRN,M-CHT,M-POS	F&S	I	
Topic 5 5. Vipaka (Lecture :3 hours, Non lecture: 1 hours)									
CO1	Define Vipaka.	CK	MK	K	L	P-VIVA	F&S	I	
CO1	State Vipaka lakshana.	CK	MK	K	L&GD	P-VIVA,INT	F&S	I	
CO1	Describe the action of Trividha Vipaka on Dosha, Dhatu and Mala with examples.	CC	MK	KH	L&PPT,TPW,FC	T- EW,P-VIVA,PRN	F&S	I	
CO1,CO3	Interpret clinical application of Vipaka.	CAP	MK	KH	L&PPT,DIS,SDL,LS	P-VIVA,QZ	F&S	I	
CO2	State Research updates of Vipaka.	CK	MK	K	L&PPT	P-VIVA,CR-RED	F&S	I	
CO1	Explain Vipakopalabdhi (Determination of Vipaka) and Taratamya (Degree of variation).	CC	MK	KH	L&PPT,FC	P-VIVA,PUZ,M-CHT	F&S	I	
Topic 6 6. Virya (Lecture :2 hours, Non lecture: 2 hours)									
CO1	Define the lakshanas of Virya.	CK	MK	K	L,SD	P-VIVA,INT	F&S	I	

					L				
CO1	Differentiate Guna and virya.	CC	MK	KH	L&PPT,RP	P-VIVA,P-EXAM,O-QZ	F&S	I	
CO1	Discuss Karma of Virya on Dosha, Dhatu and Mala.	CC	MK	KH	L&PPT,SDL,PL	P-VIVA,O-QZ,M-CHT	F&S	I	
CO1,CO3	Explain clinical application of Virya.	CC	MK	KH	L&PPT,GBL,TUT	P-VIVA,O-QZ,INT	F&S	I	
CO2	Discuss research updates of Virya.	CC	MK	KH	L&GD,DIS,SDL	P-VIVA,P-EXAM,O-QZ,CR-RED	F&S	I	
CO1	Discuss Viryaopalabdhi (Determination of Virya).	CC	MK	KH	L&GD	P-VIVA,QZ	F&S	I	
Topic 7 7. Prabhava (Lecture :2 hours, Non lecture: 1 hours)									
CO1	Define and explain Prabhava with examples.	CC	MK	KH	L&PPT	P-VIVA	F&S	I	
CO1	Describe Samanapratyayarabdha and Vichitrapratyayarabdha with examples.	CC	MK	KH	L&PPT,DIS,TBL,BL	T- EW,P-VIVA,INT	F&S	I	
CO3	Explain clinical application of Prabhava.	CC	MK	KH	L&GD,FC,LS	T- EW,P-VIVA,CR-RED	F&S	I	

CO1,CO2	Discuss research updates of Prabhava.	CC	MK	KH	L&GD,SDL	T- EW,P-VIVA,CR-RED	F&S	I	
Topic 8 8. Interrelation of Rasa-Guna-Virya-Vipaka-Prabhava (Lecture :1 hours, Non lecture: 2 hours)									
CO1	Interpret the interrelation of Rasa-Guna-Virya-Vipaka-Prabhava with respect to their strength- Pharmacodynamics.	CAP	MK	KH	L&PPT,TPW,PL	P-VIVA,CL-PR	F&S	I	
Topic 9 9. Karma (Lecture :9 hours, Non lecture: 5 hours)									
CO1	Define Karma.	CK	MK	K	L	T-OBT,P-VIVA,QZ	F&S	I	
CO1	Discuss Karma lakshana.	CC	MK	KH	L&GD	T-OBT,P-VIVA,QZ	F&S	I	
CO1,CO2,CO4,CO5	Explain Deepan karma in relation with Appetizers.	CC	MK	KH	L&GD,BL	T- EW,T-OBT,P-VIVA,QZ	F&S	I	
CO1,CO2,CO3,CO4	Critically analyze Deepan dravyas with its gunas and application in various clinical conditions.	CAP	MK	KH	L&PPT,PBL,GBL	T-OBT,P-VIVA,QZ,DEB	F&S	I	
CO1,CO2,CO3,CO4	Explain Pachan karma in relation with Digestives.	CC	MK	KH	L&PPT	T-OBT,P-VIVA,QZ	F&S	I	
CO1,CO2,CO3,CO4	Critically analyze Pachan dravyas with gunas and discuss its application in various clinical conditions.	CAN	MK	KH	L&PPT,PBL,PER	T-EMI,T-OBT,P-VIVA	F&S	I	
CO1,CO2,CO	Explain Samshodhan karma in relation with contemporary	CC	MK	KH	L_VC	T-OBT,P-	F&S	I	

4	pharmacological action.				,PL	VIVA,QZ			
CO1,CO3,CO 4	Discuss Samshohan karma and its clinical application.	CC	MK	KH	PBL, RP,PE R	T- EW,T-CS,T-OBT,P-VIVA	F&S	I	
CO1,CO2,CO 3,CO4	Explain Samshamana karma in relation with contemporary pharmacological action.	CC	MK	KH	L&G D,BL	T-EMI,T-OBT,P-VIVA	F&S	I	
CO1,CO2,CO 3,CO4	Describe Samshamana karma and its clinical application.	CC	MK	KH	L&PP T,CB L,PL	T-EMI,T-CS,P-VIVA,QZ	F&S	I	
CO1,CO2,CO 3	Explain Anuloman karma in relation with Carminative.	CC	MK	KH	L_VC ,DIS	T-EMI,T-OBT ,P-VIVA,DEB	F&S	I	
CO1,CO3	Describe Anuloman karma and its clinical application.	CC	MK	KH	L&PP T,PB L,LS	T-OBT,P-VIVA,QZ	F&S	I	
CO1,CO2,CO 3,CO4	Explain Sransana karma in relation with contemporary pharmacological action.	CC	MK	KH	L&PP T	T-EMI,T-OBT ,P-VIVA,DEB	F&S	I	
CO1,CO3	Discuss Sransan karma and its clinical application.	CC	MK	KH	L&PP T,PB L,LS	T-OBT,P-VIVA,QZ ,DEB	F&S	I	
CO1,CO2,CO 3,CO4	Explain Bhedana karma in relation with strong laxative action	CC	MK	KH	L_VC ,FC	T-EMI,T-OBT ,P-VIVA,DEB	F&S	I	
CO1,CO3	Discuss Bhedan karma and its clinical application.	CC	MK	KH	L&PP T,DIS	T-OBT,P-VIVA,QZ	F&S	I	
CO1,CO2,CO 3,CO4	Explain Rechan karma in relation with Purgative.	CC	MK	KH	L&PP T	T-EMI,T-OBT,P-VIVA	F&S	I	

CO1,CO3	Discuss Rechan karma and its clinical application.	CC	MK	KH	L&PPT,DIS	T-OBT,P-VIVA,QZ	F&S	I	
CO1,CO3	Discuss Chhedan karma and its clinical application.	CC	MK	KH	L&PPT,CBL,LS	T-EMI,T-OBT,P-VIVA	F&S	I	
CO1,CO2,CO3,CO4	Explain Lekhan karma in relation with contemporary pharmacological action.	CC	MK	KH	L&GD,BL	T-EMI,T-OBT,P-VIVA	F&S	I	
CO1,CO3	Discuss Lekhan karma and its clinical application.	CC	MK	KH	L&PPT,DIS,PL	T-OBT,P-VIVA,QZ,DEB	F&S	I	
CO1,CO2,CO3,CO4	Explain Grahi karma in relation with contemporary pharmacological action bowel binding.	CC	MK	KH	L_VC	T-EMI,T-OBT,P-VIVA	F&S	I	
CO1,CO3	Discuss of Grahi karma and its clinical application.	CC	MK	KH	L&GD,TBL	T-OBT,P-VIVA,QZ	F&S	I	
CO1,CO2,CO3,CO4	Explain Stambhan karma in relation with contemporary pharmacological action.	CC	MK	KH	L&PPT,FC	T-EMI,T-OBT,P-VIVA,DEB	F&S	I	
CO1,CO3	Discuss Stambhan karma and its clinical application.	CC	MK	KH	L&GD,PBL	T-EMI,T-OBT,P-VIVA,DEB	F&S	I	
CO1	Discuss Madakari karma with examples.	CC	MK	KH	L,DIS	T-OBT,P-VIVA,QZ	F&S	I	
CO1,CO3	Discuss Pramathi karma and its clinical application.	CC	MK	KH	L&PPT,DIS	T-EMI,T-OBT,P-VIVA	F&S	I	
CO1	Discuss Abhishyandi karma with examples.	CK	MK	K	L,DIS	T-EMI,T-OBT	F&S	I	

						,P-VIVA,DEB			
CO1	Discuss Vyavayi karma with examples.	CC	MK	KH	L,PER	T-EMI,T-OBT,P-VIVA,DEB	F&S	I	
CO1	Discuss Vikashi karma with examples.	CC	MK	KH	L,DIS	T-OBT,P-VIVA,QZ	F&S	I	
CO1,CO2	Explain Rasayan karma in relation with Rejuvenators.	CC	MK	KH	L&PPT,DIS,BL	T-EMI,P-VIVA,QZ	F&S	I	
CO1,CO3	Analyze types of Rasayan dravyas with its gunas and discuss its clinical application with research updates.	CAN	MK	KH	L&GD	T-EMI,T-OBT,P-VIVA,DEB,CR-RED	F&S	I	
CO1,CO2	Explain Vajeekaran karma in relation with Aphrodisiacs.	CC	MK	KH	L&GD,PL	T-OBT,P-VIVA,QZ	F&S	I	
CO1,CO2,CO3	Critically Analyze the types of Vajeekaran dravyas with their guna karmas and discuss its clinical application with research updates	CAN	MK	KH	L&PPT,PBL,ML,LS	T-OBT,P-VIVA,QZ,DEB,CR-RED	F&S	I	
CO1,CO2	Explain Medhya karma in relation with contemporary pharmacological actions.	CC	MK	KH	L&PPT	T-EMI,T-OBT,P-VIVA,DEB	F&S	I	
CO1,CO2,CO3	Critically analyze Medhya dravya and discuss its clinical application with research updates.	CAN	MK	KH	L&PPT,PL,PER	T-OBT,P-VIVA,QZ,WP,CR-RED	F&S	I	
Topic 10 10. Karmas of Dashemani Gana (Lecture :12 hours, Non lecture: 3 hours)									
CO1,CO8	Discuss Charakokta Dashemani karmas with their rasa, guna, vipak, virya, dhosha karma, botanical identity & pharmaco-	CC	MK	KH	L&PPT,DIS	P-VIVA,P-REC,QZ ,M-	F&S	I	

	therapeutic action of individual drugs.				,FC,REC	CHT,M-POS			
Topic 11 11. Principles of General Pharmacology (Lecture :15 hours, Non lecture: 1 hours)									
CO4,CO9	Define Pharmacology and discuss Principles of general Pharmacology.	CK	MK	K	L&PPT	PRN,QZ	F&S	I	
CO4,CO9	Discuss drug definition, drug dosage forms and route of drug administration.	CC	MK	KH	L_VC	T- EW,P-VIVA,QZ	F&S	I	
CO4,CO9	Explain pharmacokinetics (ADME) drug and pharmacodynamics.	CC	MK	KH	L_VC,DIS	P-VIVA,PRN	F&S	I	
CO4,CO9	Discuss Drug dose, Principles of drug action, Mechanism of drug action & Bioavailability	CC	MK	KH	L_VC,PER	P-VIVA,QZ	F&S	I	
CO9	Define, Describe mode of action & Discuss types with examples of following drugs acting on CNS with examples of Anaesthetics, Sedative-Hypnotic, Antiepileptic, Antiparkinsonian, Antidepressants, Antianxiety and Opioid Analgesics Drugs	CC	MK	KH	L&PPT,PBL,PrBL,FC	T- EW,T-OBT,P-VIVA,QZ,C-INT	F&S	III	
CO9	Define, Describe mode of action & Discuss types with examples of following drugs acting on Peripheral (somatic) Nervous System with examples of Skeletal Muscle Relaxants and Local Anaesthetics Drugs.	CC	MK	KH	L&PPT,PBL,FC	T- EW,T-OBT,P-VIVA,QZ	F&S	III	
CO9	Define, Describe mode of action & Discuss types with examples of following drugs acting on Autacoids and Related of Nonsteroidal Antiinflammatory (NSAIDs), Antipyretic and Analgesics Drug	CC	MK	KH	L&PPT,PBL,FC	T- EW,T-OBT,P-VIVA,PRN	F&S	III	
CO9	Define, Describe mode of action & Discuss types with examples of following drugs acting on Respiratory Disorders -	CC	MK	KH	L&PPT,PB	T-OBT,P-VIVA,PRN	F&S	III	

	Bronchodialators, Aerosols/ Inhalants, Expectorants and Anti tussives Drugs				L,BL				
CO9	Define, Describe mode of action & Discuss types with examples of following drugs acting on Cardiovascular Drugs as Antihypertensive and Antianginal Drugs	CC	MK	KH	L_VC ,FC	T-OBT,P-VIVA,PRN	F&S	III	
CO9	Define, Describe mode of action & Discuss types with examples of following drugs acting on Kidney as Diuretics	CC	MK	KH	L&PPT,TPW,BL	T-OBT,P-VIVA,QZ	F&S	III	
CO9	Define, Describe mode of action & Discuss types with examples of following drugs acting as Haematinics, Coagulants, Anticoagulants and Hypolipidaemic Drugs	CC	MK	KH	L&PPT,PBL,BL	T- EW,T-OBT,P-VIVA	F&S	III	
CO9	Define, Describe mode of action & Discuss types with examples of following drugs acting on Gastrointestinal tract as Antacid, Carminatives, Digestants, Antiemetics, Laxatives, Antidiarrhoeal and Hepatoprotective Drugs	CC	MK	KH	L&PPT,L&GD,L_VC	T- EW,T-OBT,P-VIVA,QZ	F&S	III	
CO9	Define, Describe mode of action & Discuss types with examples of following drugs acting as Antibiotics and Antitubercular.	CC	MK	KH	L&PPT,FC,GBL	T- EW,P-VIVA,QZ	F&S	III	
CO9	Define, Describe mode of action & Discuss types with examples of following drugs acting as **Antifungal, Antiviral, Antimalarial and Anthelmintic Drugs**	CC	MK	KH	L&PPT,PBL,GBL	T- EW,T-OBT,P-VIVA,QZ	F&S	III	
CO9	Define, Describe mode of action & Discuss types with examples of following drugs acting on Hormones and Related Drugs as Thyroid Hormone, Thyroid Inhibitors, Insulins, Oral Antidiabetic, Hormonal Contraceptives, Uterine Stimulants and Uterine Relaxants Drugs.	CC	MK	KH	L&PPT,BL,PER	T- EW,T-OBT,P-VIVA,PRN	F&S	III	

CO9	Define, Describe mode of action & Discuss types with examples of following drugs acting on as Antiseptics , Disinfectants, Vaccines, Vitamins, Water imbalance and IV	CC	MK	KH	L&PPT,BL, PER	T- EW,T-OBT,P-VIVA	F&S	III	
Topic 12 12. Mishraka Gana (Lecture :6 hours, Non lecture: 2 hours)									
CO1,CO3	Explain Brihatpanchamoola composition.	CC	MK	KH	L&PPT,EDU	T- EW,P-VIVA,P-POS,QZ ,M-CHT	F&S	III	
CO1,CO3	Describe Guna karma and combined therapeutic effect of Brihatpanchamoola.	CC	MK	KH	L&PPT,DIS ,TBL	T- EW,P-VIVA,P-POS,QZ ,M-CHT	F&S	III	
CO1,CO3	Explain Laghupanchamoola composition.	CC	MK	KH	L&GD	T- EW,P-VIVA,P-POS,QZ ,M-CHT	F&S	III	
CO1,CO3	Describe Guna karma and combined therapeutic effect of Laghupanchamoola.	CC	MK	KH	L&PPT,DIS ,PL	T- EW,P-VIVA,P-POS,QZ	F&S	III	
CO1,CO3	Explain Vallipanchamoola composition.	CC	MK	KH	L&PPT	T- EW,P-VIVA,P-POS,QZ ,M-CHT	F&S	III	
CO1,CO3	Describe Guna karma and combined therapeutic effect of Vallipanchamoola.	CC	MK	KH	L&GD,PER	T- EW,P-VIVA,QZ	F&S	III	
CO1,CO3	Explain Kantakapanchamoola composition.	CC	MK	KH	L&PPT,BS,	T- EW,P-VIVA,QZ	F&S	III	

					TPW				
CO1,CO3	Describe Guna karma and combined therapeutic effect of Kantakapanchamoola.	CC	MK	KH	L&PPT,LS, PER	P-POS,QZ ,M-CHT	F&S	III	
CO1,CO3	Explain Trinapanchamoola composition.	CC	MK	KH	L_VC ,PER	P-VIVA,P-EXAM,QZ	F&S	III	
CO1,CO3	Describe Guna karma and combined therapeutic effect of Trinapanchamoola.	CC	MK	KH	L&PPT,CBL,PL	T- EW,P-VIVA,M-CHT	F&S	III	
CO1,CO3	Explain Panchavalkala composition.	CC	MK	KH	L&PPT,BL, GBL	P-VIVA,P-POS,QZ	F&S	III	
CO1,CO3	Describe Guna karma and combined therapeutic effect of Panchavalkala.	CC	MK	KH	L&PPT,FC	T-CS,T-OBT, P-VIVA,QZ	F&S	III	
CO1,CO3	Explain Triphala composition	CC	MK	KH	L,DIS	T- EW,P-VIVA,P-POS	F&S	III	
CO1,CO3	Describe Guna karma and combined therapeutic effect of Triphala.	CC	MK	KH	L&PPT,PER	T-OBT,P-VIVA,P-EXAM,QZ	F&S	III	
CO1,CO3	Explain Trikatu composition.	CC	MK	KH	L&PPT,PL	T-EMI,P-VIVA,QZ	F&S	III	
CO1,CO3	Describe Guna karma and combined therapeutic effect of Trikatu	CC	MK	KH	L&PPT,PL	T-OBT,P-VIVA,P-POS	F&S	III	
CO1,CO3	Explain Trimada composition	CC	MK	KH	L,DIS	T- EW,P-VIVA,QZ	F&S	III	

CO1,CO3	Describe Guna karma and combined therapeutic effect of Trimada.	CC	MK	KH	L&PPT,DIS,TUT	T- EW,P-VIVA,QZ	F&S	III	
CO1,CO3	Explain Chaturusana composition.	CC	MK	KH	L&PPT	T-OBT,P-VIVA,P-POS	F&S	III	
CO1,CO3	Describe Guna karma and combined therapeutic effect of Chaturusana.	CC	MK	KH	L&PPT,FC	P-VIVA,P-POS,QZ	F&S	III	
CO1,CO3	Explain Panchakola composition.	CC	MK	KH	L&PPT,L_VC	P-VIVA,QZ	F&S	III	
CO1,CO3	Describe Guna karma and combined therapeutic effect of Panchakola.	CC	MK	KH	L&PPT,DIS	T- EW,T-CS,P-VIVA,QZ	F&S	III	
CO1,CO3	Explain Shadusana composition.	CC	MK	KH	L&PPT,PL	T-OBT,P-VIVA,P-POS	F&S	III	
CO1,CO3	Describe Guna karma and combined therapeutic effect of Shadusana	CC	MK	KH	L&PPT,FC	T- EW,P-VIVA,QZ	F&S	III	
CO1,CO3	Explain Chaturbeeja composition.	CC	MK	KH	L&PPT,L_VC	T-OBT,P-VIVA,P-EXAM	F&S	III	
CO1,CO3	Describe Guna karma and combined therapeutic effect of Chaturbeeja	CC	MK	KH	L&PPT,PER	T- EW,P-VIVA,QZ	F&S	III	
CO1,CO3	Explain Trijataka composition.	CC	MK	KH	L_VC,DIS,SDL	T-OBT,P-VIVA,P-EXAM,P-POS	F&S	III	

CO1,CO3	Describe Guna karma and combined therapeutic effect of Trijataka	CC	MK	KH	L&PPT,PL	T- EW,P-VIVA,P-POS	F&S	III	
CO1,CO3	Explain Chaturajataka composition.	CC	MK	KH	L_VC,PER	T-OBT,P-VIVA,QZ	F&S	III	
CO1,CO3	Describe Guna karma and combined therapeutic effect of Chaturajataka.	CC	MK	KH	L&PPT,DIS	T- EW,P-VIVA,P-POS	F&S	III	
CO1,CO3	Explain Panchatikta composition.	CC	MK	KH	L&PPT,FC	T-OBT,P-VIVA,P-REC,QZ	F&S	III	
CO1,CO3	Describe Guna karma and combined therapeutic effect of Panchatikta.	CC	MK	KH	L&PPT,PL	T- EW,P-VIVA,P-POS	F&S	III	
CO1,CO3	Explain Chaturbhadra composition.	CK	MK	K	L,DIS	T-OBT,P-VIVA,QZ	F&S	III	
CO1,CO3	Describe Guna karma and combined therapeutic effect of Chaturbhadra.	CC	MK	KH	L&PPT,FC	T-EMI,P-VIVA,QZ	F&S	III	
CO1,CO3	Explain Trikarshika composition.	CC	MK	KH	L,DIS	T-OBT,P-VIVA,P-EXAM	F&S	III	
CO1,CO3	Describe Guna karma and combined therapeutic effect of Trikarshika.	CC	MK	KH	L&PPT,DIS,PL	T-OBT,P-VIVA,QZ	F&S	III	
Topic 13 13. Nomenclature of dravya as per Nighantu, Vedic taxonomy and Botany (Lecture :0 hours, Non lecture: 2 hours)									
CO1	Describe the Nomenclature of dravya as per Raj Nighantu.	CC	MK	KH	L&PPT,FC,RP	P-VIVA,PRN,P-ID,QZ	F&S	III	
CO1	Explain the Nomenclature of dravya as per Vedic taxonomy.	CC	MK	KH	L&PPT	P-VIVA,P-ID,QZ	F&S	III	

CO1	Discuss the Nomenclature of dravya as per botany.	CC	MK	KH	L&PPT,BL,PER	P-VIVA,P-ID,QZ	F&S	III	
Topic 14 14. Prashasta Bheshaja, Bheshaja Pariksha and drug evaluation method with correlation as per Pharmacognosy (Lecture :1 hours, Non lecture: 2 hours)									
CO1,CO5	Describe Prashasta Bheshaja.	CC	MK	KH	L&GD,PL	P-VIVA,QZ	F&S	III	
CO1,CO5	Explain Bheshaja Pariksha of Charaka samhita vimana sthana.	CC	MK	KH	L&GD,SDL,LS	P-VIVA,QZ,M-CHT	F&S	III	
CO1,CO5	Discuss drug evaluation method in correlation with Pharmacognosy.	CC	MK	KH	L&PPT,DIS	P-VIVA,QZ	F&S	III	
Topic 15 15. Dravyasangrahana and Drug collection methods as per GFCP (Good Field collection practices) (Lecture :1 hours, Non lecture: 0 hours)									
CO1,CO2	Discuss Dravyasangrahana and Drug collection methods as per GFCP (Good Field collection practices).	CC	DK	KH	L&PPT,PER	P-VIVA,PUZ,CHK	F&S	III	
CO1,CO2	Discuss Drug collection methods as per GFCP (Good Field collection practices).	CC	DK	KH	L&PPT,DIS,PrBL	P-VIVA,PUZ,CHK	F&S	III	
Topic 16 16. GCP (Good cultivation practices), seed bank, conservation of medicinal plants, knowledge about RET (Rear, Endangered & Threatened) medicinal plants. (Lecture :1 hours, Non lecture: 0 hours)									
CO2	Discuss good cultivation practices, seed bank, conservation of medicinal plants, knowledge about RET (Rear, Endangered & Threatened) medicinal plants.	CC	DK	KH	L&PPT,L_VC,FC	P-VIVA,M-POS	F&S	III	

Topic 17 17. Abhava Pratinidhi Dravya (substitutes) (Lecture :1 hours, Non lecture: 1 hours)									
CO1,CO7	Discuss the concept of Abhava pratinidhi dravya (substitutes) as per Bhavaprakasha.	CC	MK	KH	L&G D,BS, EDU	P-VIVA,QZ	F&S	III	
Topic 18 18. Classifications and techniques of aqueous and alcoholic extracts (Lecture :0 hours, Non lecture: 2 hours)									
CO2,CO6	Appraise the techniques of aqueous and alcoholic extracts of medicinal plants.	CC	DK	KH	L_VC ,D	P-VIVA,DOPS	F&S	III	
Topic 19 19. Adverse drug reaction and Pharmacovigilance with recent updates (Lecture :1 hours, Non lecture: 2 hours)									
CO2,CO8	Explain adverse drug reaction and pharmacovigilance in ayurveda with recent updates.	CC	MK	KH	L&PP T,L& GD,L S	P-VIVA,PRN, QZ ,M-CHT	F&S	III	V-RS
Topic 20 20. NMPB (National Medicinal Plant Board), CCRAS (Central Council of Research in Ayurveda Sciences), API (Ayurvedic Pharmacopeia of India), GCTM (Global Centre for Traditional Medicine), PCIMH (Pharmacopeia Commission of Indian Medicine and Homeopathy) (Lecture :1 hours, Non lecture: 0 hours)									
CO2	State NMPB (National Medicinal Plant Board), CCRAS (Central Council of Research in Ayurveda Sciences), API (Ayurvedic Pharmacopeia of India), GCTM (Global Centre for Traditional Medicine) and PCIMH (Pharmacopeia Commission of Indian Medicine and Homeopathy).	CK	NK	K	SDL	P-VIVA,QZ ,INT	F&S	III	
Topic 21 21. Vrikshayurveda and Ethno-medicine (Lecture :1 hours, Non lecture: 1 hours)									
CO2	Explain concept of Vrikshayurveda and Ethno medicine.	CC	NK	KH	L&G D,ML ,PER	P-VIVA,CR-RED	F&S	III	
Topic 22 22. Network pharmacology and Bioinformatics (Lecture :1 hours, Non lecture: 1 hours)									

CO2	Describe Network Pharmacology and Bioinformatics.	CC	NK	KH	L&G D,SD L,LS	P-VIVA,CR-RED	F&S	III	

Paper 2 Applied Dravyaguna									
A3 Course outcome	**B3** Learning Objective (At the end of the session, the students should be able to)	**C3** Domain/sub	**D3** Must to know / desirable to know / Nice to know	**E3** Level Does/ Shows how/ Knows how/ Know	**F3** T-L method	**G3** Assessment (Refer abbreviations)	**H3** Formative/ summative	**I3** Term	**J3** Integration
Topic 1 1. Bheshajavacharaniya (Criteria's to be considered for selection of drugs in vyadhis) (Lecture :1 hours, Non lecture: 6 hours)									
CO5	Interpret the selection of appropriate drugs in different vyadhis as per criteria's mentioned in Bheshajavacharaniya (as per As. Sa. Su 23)	CAP	MK	KH	L&PPT,CBL,PrBL,SDL	T- EW,P-VIVA,QZ	F&S	II	H-RN,H-SW
Topic 2 2.1 Dravya (Drug) Nama-Guna-Karma Jnana (Lecture :45 hours, Non lecture: 10 hours)									
CO3	Specify useful parts with its Rasapanchaka of following drugs.	CK	MK	K	L&GD,CBL,FC	T-OBT,P-VIVA	F&S	II	
CO4	Describe karma,agryakarma and dosha karma of following drugs.	CC	MK	KH	L&PP	T-EMI,T-OBT	F&S	II	

					T,DIS ,ML	,P-VIVA,QZ			
CO5	Explain Amayikaprayoga used in Vyadhi (Disease) pertaining to various Srotas and Vyadhiavastha (Stage).	CC	MK	KH	L&G D,BS, CBL	T-EMI,T-OBT,P-VIVA	F&S	II	
CO5	Indicate the Kalpana (dosage form), Matra (Dose), Anupana (Vehicle), Marga(Route), Sevana kala (Time of administration), Kalavadhi (Duration) and Pathya-pathya) of following drugs.	CAP	MK	KH	L&PP T,DIS ,GBL	T-EMI,T-OBT ,P-VIVA,PRN	F&S	II	V-RS, H-SW
CO2	Enlist active phyto-constituents & important formulations Discuss research updates of following drugs.	CK	MK	K	L&PP T,ML	T-OBT,P-VIV A,CR-RED	F&S	II	
CO8	Enlist botanical name & family. Explain main synonyms as per Bruhatryees and Bhavaprakasha.Vernacular name (Hindi,English and local name) of following drugs.	CK	MK	KH	L&PP T,DIS	T-OBT,P-VIVA,QZ ,O-QZ	F&S	II	
CO8	Demonstrate external morphology-habit, root, leaf, stem, flower, inflorescence, fruit, seed and officinal useful parts of following drugs.	CC	MK	KH	L_VC ,DIS, BS	T-OBT,P-VIVA,O-QZ	F&S	II	
CO7	Describe varieties, grahyagrahyatwa Adulterants, substitute and toxic effects of following drugs wherever applicable	CC	MK	KH	L&G D	T- EW,T-OBT ,P-VIVA,QZ	F&S	II	H-AT
Topic 3 2.2 Dravya (Drugs) Nama -Guna-Karma-Jnana (Lecture :29 hours, Non lecture: 20 hours)									
CO3	Specify useful parts with its Rasapanchaka of following drugs	CK	MK	K	L&PP T,DIS	T-EMI,T-OBT ,P-VIVA,QZ	F&S	III	
CO4	Describe karma, agryakarma and dosha karma of following drugs.	CC	MK	KH	L&PP T,DIS ,BS	T-OBT,P-VIVA,QZ	F&S	III	
CO5	Explain Amayikaprayoga used in Vyadhi (Disease) pertaining to	CC	MK	KH	L&PP	T-OBT,P-	F&S	III	

	various Srotas and vyadhiavastha (Stage).				T,DIS ,CBL	VIVA,QZ			
CO5	Indicate the Kalpana(dosage form), Matra (Dose), Anupana (Vehicle), Marga (Route), Sevana kala (Time of administration), Kalavadhi (Duration) and Pathya-pathya) of following drugs.	CAP	MK	KH	L&PP T,DIS ,ML	T-EMI,P-VIVA	F&S	III	V-RS, H-SW
CO2	Enlist active phyto-constituents & important formulations. Discuss research updates of following drugs.	CK	MK	K	L&G D,BS	T-EMI,T-OBT ,P-VIVA,QZ	F&S	III	
CO8	Enlist botanical name & family. Explain main Synonyms as per Bruhatryees and Bhavaprakasha. Vernacular name (Hindi, English and local name) of following drugs.	CK	MK	K	L&G D,FC, ML	T-OBT,P-VIVA,QZ	F&S	III	
CO8	Demonstrate external morphology-habit, root, leaf, stem, flower, inflorescence, fruit, seed and officinal useful parts of following drugs.	CC	MK	KH	L_VC ,ML	T-OBT,P-VIVA,QZ	F&S	III	
CO7	Describe varieties, grhyahrahyatwa, adulterants, substitute and toxic effects of following drugs wherever applicable.	CC	MK	KH	L&PP T,DIS ,EDU	T-EMI,T-OBT ,P-VIVA,PUZ	F&S	III	H-AT

List of Practicals(Term and Hours)

PRACTICALS (Marks-100)			
S.No	**List of Topics**	**Term**	**Hours**
1	1. Assessment and Understanding the relation between Parthivatwa & subjective/ objective parametric tests	1	10
2	2. Assessment of objective parametric measures of Guna	1	12
3	3. Assessment of Rasa	1	6
4	4.Comparative organoleptic and macroscopic examination	1	23
5	5. Microscopic Identification of genuine and adulterated drug	1	4
6	6. Demonstration of skills to identify the medicinal plants in the college garden.	1	10
7	7. Out campus visit (Cultivated gardens, Tissue culture lab, Herbaria, Pharmacognosy lab, Quality control lab and Forest plant demonstration)	1	10
8	8. Dravya prayoga	1	12
9	9. Physico-chemical study	2	8
10	10. Phytochemical	2	4
11	11. Thin Layer Chromatography (TLC) technique	2	2
12	12. Demonstration of skills to identify the medicinal plants in the college garden	2	10
13	13. Out campus visit (cultivated gardens & In-situ plant demonstration)	2	10
14	14. Ekala dravya prayoga	2	10
15	15. Different Cultivation technique including methods mentioned in Vrikshayurveda	2	6
16	16. Exercise on Network pharmacology	3	6
17	17. Preparations of digital herbarium	3	2
18	18. Demonstration of skills to identify the medicinal plants in the college garden	3	10
19	19. Out campus visit (cultivated gardens & In-situ plant demonstration)	3	10
20	20. Ekala dravya prayoga	3	10

Table 4: Learning objectives (Practical)

A4 Course outcome	B4 Learning Objective (At the end of the session, the students should be able to)	C4 Domain/sub	D4 Must to know / desirable to know / Nice to know	E4 Level Does/ Shows how/ Knows how/ Know	F4 T-L method	G4 Assessment (Refer abbreviations)	H4 Formative/ summative	I4 Term	K4 Integration
Topic 1 1. Assessment and Understanding the relation between Parthivatwa & subjective/ objective parametric tests									
CO1,CO6	Observe the objective parametric measures to understand the relation between Parthivatwa by Density (bulk) of Asthishrnkhala, Sariva,Vidari, Maricha, Shatavari, Jambu, Godhuma & Ushira.	PSY-GUD	MK	KH	PT	P-VIVA	F&S	I	
CO1,CO6	Observe the objective parametric measures to understand the relation between Jaliyatwa by Viscosity, Moisture content of Kumari, Vidari, Sariva, Shunthi, Ikshu, Usheera, Kamala & Apamarga.	PSY-GUD	MK	KH	PT	P-VIVA	F&S	I	
CO1,CO6	Observe the objective parametric measures to understand the relation between Aagneyatwa by Moisture content of Shunthi, Shatavari, Maricha, Dhataki, Chitraka, Gokshura, Hingu & Chandana.	PSY-GUD	MK	KH	PT	P-VIVA	F&S	I	
CO1,CO6	Observe the objective parametric measures to understand the relation between Vayaviyatwa by Fat content & Bulk density of Usheera, Ashwagandha, Nimba, Vidari, Khadira, Tila, Jambu & Kapikacchu.	PSY-GUD	MK	KH	PT,D_L	P-VIVA	F&S	I	

CO1,CO6	Observe the objective parametric measures to understand the relation between Aakashiyatwa by Bulk density of Usheera, Kumari, Apamarga, Jeeraka & Jatamansi.	PSY-GUD	MK	KH	PT,D_L	P-VIVA	F&S	I	
CO1,CO6	Participate in the methods of specific gravity (Solid) and bulk desity of Asthishrukhala, Sariva, Vidari, Maricha, Shatavari, Jambu, Godhum & Ushir by objective parameters measures to understand the relation between Parthivatwa.	AFT-RES	MK	KH	PT,D_L	P-VIVA	F&S	I	
CO1,CO6	Follow the methods of Viscosity, Moisture content & Specific gravity (Liquid) of Kumari, Vidari, Sariva, Shunthi, Ikshu, Usheera, Kamala & Apamarga by objective parameters measures to understand the relation between Jaliyatwa.	AFT-REC	MK	KH	PT,D_L	P-VIVA	F&S	I	
CO1,CO6	Descibe the methods of pH and Moisture content of Shunthi, Shatavari, Maricha, Dhataki, Chitraka, Gokshura, Hingu & Chandan by objective parameters measures to understand the relation between Agneeyatwa.	AFT-REC	MK	KH	PT,D_L	P-VIVA	F&S	I	
CO1,CO6	Answer to the methods of Fat content , Specific gravity (liquid) & Bulk density of Usheera, Ashwagandha, Nimba, Vidari, Tila, Jambu & Kapikachhu by objective parameters measures to understand the relation between Vayaviyatwa.	AFT-RES	MK	KH	PT,D_L	P-VIVA	F&S	I	
CO1,CO6	Follow the methods of Bulk density of Ushira, Kumari, Apamarga, Jeeraka & Jatamansi by objective parameters measures to understand the relation between Akashiyatwa	AFT-REC	MK	KH	PT,D_L	P-VIVA	F&S	I	
CO1,CO6	Perform the objective parametric measures to understand the relation between Parthivatwa by Specific gravity (solid) of Asthishrnkhala, Sariva,Vidari, Maricha, Shatavari, Jambu, Godhuma & Ushira.	PSY-ADT	MK	SH	PRA	P-EXAM,P-PRF	F&S	I	

CO1,CO6	Perform the objective parametric measures to understand the relation between Jaliyatwa Specific gravity (Liquid) of Kumari, Vidari, Sariva, Shunthi, Ikshu, Usheera, Kamala & Apamarga.	PSY-ADT	MK	SH	PT	P-EXAM,P-PRF	F&S	I	
CO1,CO6	Perform the objective parametric measures to understand the relation between Aagneyatwa by pH of Shunthi, Shatavari, Maricha, Dhataki, Chitraka, Gokshura, Hingu & Chandana.	PSY-ADT	MK	SH	PT	P-EXAM,P-PRF	F&S	I	
CO1,CO6	Perform the objective parametric measures to understand the relation between Vayaviyatwa by Specific gravity (Liquid) of Usheera, Ashwagandha, Nimba, Vidari, Khadira, Tila, Jambu & Kapikacchu.	PSY-ADT	MK	SH	PT	P-EXAM,P-PRF	F&S	I	
Topic 2 2. Assessment of objective parametric measures of Guna									
CO1,CO6	Observe the assessment of objective parametric measures of Shatavari and Bala for its guru guna by Density (bulk).	PSY-GUD	MK	KH	PT,D_L	P-VIVA	F&S	I	
CO1,CO6	Observe the Specific gravity (Liquid and solid) of Shatavari and Bala for its guru guna.	PSY-GUD	MK	KH	PT,D_L	P-VIVA	F&S	I	
CO1,CO6	Observe the assessment of objective parametric measures of Yava and Dhanyaka for its Laghu guna by Density (bulk)	PSY-GUD	MK	KH	PT,D_L	P-VIVA	F&S	I	
CO1,CO6	Demonstrate the Specific gravity (Liquid and solid) Yava and Dhanyaka for its Laghu guna.	PSY-GUD	MK	KH	PT,D_L	P-VIVA	F&S	I	
CO1,CO6	Observe the assessment of objective parametric measures of Snigdha guna drugs by total fat content, moisture content of Tila and Eranda	PSY-GUD	MK	KH	PT,D_L	P-VIVA	F&S	I	
CO1,CO6	Demonstrate Swelling index of Snigdha guna drugs of Tila, and Eranda.	PSY-GUD	MK	KH	D_L,PRA	P-VIVA	F&S	I	
CO1,CO6	Observe the assessment of objective parametric measures of	PSY-	MK	KH	PT,D_	P-VIVA	F&S	I	

	Ruksha guna drugs by total fat content and moisture content of Kulattha & Vidanga	GUD			L				
CO1,CO6	Demonstrate Swelling index of Ruksha guna drugs of Kulattha & Vidanga	PSY-GUD	MK	KH	PT,D_L	P-VIVA	F&S	I	
Topic 3 3. Assessment of Rasa									
CO2,CO6	Perform the assessment of Rasa based on classical symptoms for each rasa dravyas.	PSY-ADT	MK	SH	PT,D_L	P-EXAM,P-PRF,INT	F&S	I	
Topic 4 4.Comparative organoleptic and macroscopic examination									
CO6	Perform the comparative organoleptic characters (Taste, Colour, Smell, Sound, Touch) and macroscopic examination (Size, Shape, Fracture, External markings like lenticels, ridges, nodes, furrows, cracks etc) of root of Ashwagandha, Chitraka, Manjistha, Musta, Shatavari, Vatsanabha and Yashtimadhu.	PSY-ADT	MK	SH	L_VC,PT,D_L	P-EXAM,P-PRF	F&S	I	
CO6	Perform the comparative organoleptic characters (Taste, Colour, Smell, Sound, Touch) and macroscopic examination (Size, Shape, Fracture, External markings like lenticels, ridges, nodes, furrows, cracks etc) of Rhizome/Stolon of Haridra, Katuki, Shunthi and Vacha.	PSY-ADT	MK	SH	PT,D_L	P-EXAM,P-PRF	F&S	I	
CO6	Perform the comparative organoleptic characters (Taste, Colour, Smell, Sound, Touch) and macroscopic examination (Size, Shape, Fracture, External markings like lenticels, ridges, nodes, furrows, cracks etc) of Stem of Asthishrinkhala and Guduchi.	PSY-ADT	MK	SH	PT,D_L	P-EXAM,P-PRF	F&S	I	
CO6	Perform the comparative organoleptic characters (Taste, Colour, Smell, Sound, Touch) and macroscopic examination (Size, Shape, Fracture, External markings like lenticels, ridges, nodes, furrows, cracks etc) of Bark of Arjuna, Ashoka, Kutaja, Nimba and Twak.	PSY-ADT	MK	SH	BS,PT,D_L	P-EXAM,P-PRF	F&S	I	

CO6	Perform the comparative organoleptic characters (Taste, Colour, Smell, Sound, Touch) and macroscopic examination (Size, Shape, Fracture, External markings like lenticels, ridges, nodes, furrows, cracks etc) of Heart wood of Beejaka, Chandana and Khadira	PSY-ADT	MK	SH	BS,PT,D_L	P-EXAM,P-PRF	F&S	I	
CO6	Perform the comparative organoleptic characters (Taste, Colour, Smell, Sound, Touch) and macroscopic examination (Size, Shape, Fracture, External markings like lenticels, ridges, nodes, furrows, cracks etc) of Leaf of Kumari, Meshashringi and Vasa.	PSY-ADT	MK	SH	BS,PT,D_L	P-EXAM,P-PRF	F&S	I	
CO6	Perform the comparative organoleptic characters (Taste, Colour, Smell, Sound, Touch) and macroscopic examination (Size, Shape, Fracture, External markings like lenticels, ridges, nodes, furrows, cracks etc) of Flower of Dhataki, Kunkum (kesara) and Lavanga.	PSY-ADT	MK	SH	PT,D_L	P-EXAM,P-PRF	F&S	I	
CO6	Perform the comparative organoleptic characters (Taste, Colour, Smell, Sound, Touch) and macroscopic examination (Size, Shape, Fracture, External markings like lenticels, ridges, nodes, furrows, cracks etc) of Fruit of Amalaki, Aragavadha, Bhallataka, Bibhitaki, Gokshura, Haritaki, Madanphala, Maricha, Pippali and Vidanga.	PSY-ADT	MK	SH	D_L,PRA	P-EXAM,P-PRF	F&S	I	
CO6	Perform the comparative organoleptic characters (Taste, Colour, Smell, Sound, Touch) and macroscopic examination (Size, Shape, Fracture, External markings like lenticels, ridges, nodes, furrows, cracks etc) of Phalaraja of Kampillaka.	PSY-ADT	MK	SH	PT,D_L	P-EXAM,P-PRF	F&S	I	
CO6	Perform the comparative organoleptic characters (Taste, Colour, Smell, Sound, Touch) and macroscopic examination (Size, Shape, Fracture, External markings like lenticels, ridges, nodes, furrows, cracks etc) of Seed of Bakuchi,Ela, Eranda, Jyotishmati	PSY-ADT	MK	SH	PT,D_L	P-EXAM,P-PRF	F&S	I	

	and Kapikacchu.								
CO6	Perform the comparative organoleptic characters (Taste, Colour, Smell, Sound, Touch) and macroscopic examination (Size, Shape, Fracture, External markings like lenticels, ridges, nodes, furrows, cracks etc) of Unorganized drugs of Guggulu, Hingu and Mocharasa.	PSY-ADT	MK	SH	PT,D_L	P-EXAM,P-PRF	F&S	I	
CO6	Perform the comparative organoleptic characters (Taste, Colour, Smell, Sound, Touch) and macroscopic examination (Size, Shape, Fracture, External markings like lenticels, ridges, nodes, furrows, cracks etc) of Whole plant of Apamarga, Bhrungaraja, Bhumyamalaki, Brahmi, Kalmeghaand and Mandukaparni.	PSY-ADT	MK	SH	PT,D_L	P-EXAM,P-PRF	F&S	I	
CO6	Perform the comparative organoleptic characters (Taste, Colour, Smell, Sound, Touch) and macroscopic examination (Size, Shape, Fracture, External markings like lenticels, ridges, nodes, furrows, cracks etc) of Galls of Karkatshrungi.	PSY-ADT	MK	SH	PT,D_L	P-EXAM,P-PRF	F&S	I	
Topic 5 5. Microscopic Identification of genuine and adulterated drug									
CO6	Perform the comparative microscopic examination of genuine and adulterated any two samples of Root / stem / leaf /bark / fruits (E.g. like Sariva / Manjishta / Vidanga / Maricha / Ashoka).	PSY-ADT	MK	SH	TUT,PT,D_L	P-EXAM,P-PRF	F&S	I	
Topic 6 6. Demonstration of skills to identify the medicinal plants in the college garden.									
CO8	Demonstrate identification features of college garden medicinal plants for their morphology, taxonomical keys, regional flora with therapeutic uses.	PSY-GUD	MK	KH	L_VC,ML,SDL,DG,FV	P-VIVA,P-EXAM,P-ID	F&S	I	
CO8	Participate actively in Identification of Medicinal plants.	AFT-RES	MK	SH	DG	P-VIVA,P-EXAM	F&S	I	

Topic 7 7. Out campus visit (Cultivated gardens, Tissue culture lab, Herbaria, Pharmacognosy lab, Quality control lab and Forest plant demonstration)									
CO8	Visit to observe the identification features of medicinal plants which are from cultivated or natural habitat / forest plant.	PSY-GUD	MK	KH	ML,SDL,DG	P-VIVA,P-EXAM	F&S	I	
CO8	Visit to observe the Tissue culture techniques of medicinal plants in local / nearby Tissue culture lab.	PSY-GUD	MK	KH	PT,D_L	P-VIVA	F&S	I	
CO8	Visit to observe the herbaria of medicinal plants in nearby institute.	PSY-GUD	MK	KH	PT,D	P-VIVA	F&S	I	
CO6	Visit to observe the nearby AYUSH approved Quality control lab for quality control techniques.	PSY-GUD	MK	KH	L_VC,PT,D_L	P-VIVA	F&S	I	
Topic 8 8. Dravya prayoga									
CO5	Observe the selection of Ekala Dravya (single drug) in various clinical conditions	PSY-GUD	MK	KH	DIS,CBL,SDL,TUT	P-VIVA,QZ	F&S	I	
CO5	Perform the selection of Ekala dravya prayoga in various clinical conditions by masked case sheets.	PSY-ADT	MK	SH	CBL,ECE	P-VIVA,P-EXAM	F&S	I	H-RN
Topic 9 9. Physico-chemical study									
CO6	Perform the foreign matter study of minimum 2 useful parts of medicinal plants.	PSY-ADT	MK	SH	PT,D_L	P-VIVA	F&S	II	
CO6	Observe the Loss on drying (LoD) study of minimum 2 useful parts of medicinal plants.	PSY-GUD	MK	KH	TUT,PT,D_L	P-VIVA	F&S	II	

CO6	Observe the Ash value and Extractive value of minimum 2 useful parts of medicinal plants.	PSY-GUD	MK	KH	PT,D_L	P-VIVA	F&S	II	
Topic 10 10. Phytochemical									
CO6	Perform Preliminary phytochemical study of minimum 2 medicinal plant extracts.	PSY-ADT	MK	SH	PT,D_L	P-VIVA,P-EXAM,P-PRF	F&S	II	
Topic 11 11. Thin Layer Chromatography (TLC) technique									
CO6	Observe the TLC (Thin layer chromatography) technique of one medicinal plant extract.	PSY-GUD	MK	KH	TUT,PT,D_L	P-VIVA,INT	F&S	II	
Topic 12 12. Demonstration of skills to identify the medicinal plants in the college garden									
CO8	Demonstrate identification features of college garden medicinal plants for their morphology, taxonomical keys, regional flora with therapeutic uses.	PSY-GUD	MK	KH	L_VC,DG	P-VIVA,P-EXAM,P-PRF	F&S	II	
CO8	Participate actively in Identification of Medicinal plants.	AFT-RES	MK	SH	DG	P-VIVA	F&S	II	
Topic 13 13. Out campus visit (cultivated gardens & In-situ plant demonstration)									
CO8	Visit to observe the identification features of medicinal plants which are from cultivated or natural habitat / forest plant.	PSY-GUD	MK	KH	DG	P-VIVA	F&S	II	
Topic 14 14. Ekala dravya prayoga									
CO5	Perform the selection of Ekala dravya prayoga in various clinical conditions by masked case sheets.	PSY-ADT	MK	SH	DIS,CBL,ECE,D_BED	P-VIVA,P-EXAM	F&S	II	H-RN
CO5	Appraise the value of selection of Ekala Dravya Prayog in	AFT-	MK	SH	PBL,	P-VIVA,P-	F&S	II	H-RN

	various clinical conditions by providing masked case sheets.	VAL			CBL, CD	EXAM			
Topic 15 15. Different Cultivation technique including methods mentioned in Vrikshayurveda									
CO8	Demonstrate different cultivation technique of medicinal plants in garden.	PSY-GUD	MK	KH	L_VC ,DG	P-VIVA,INT	F&S	II	
CO8	Demonstrate different cultivation methods mentioned in Vrikshayurveda in garden.	PSY-GUD	MK	KH	DG	P-VIVA	F&S	II	
Topic 16 16. Exercise on Network pharmacology									
CO2	Conduct the Identification (Data mining) active constituents by Pubmed, IMPPATor PubChem in digital library.	PSY-SET	MK	KH	DIS,D	P-VIVA,PA	F&S	III	
CO2	Conduct Target identification by Binding DB.	PSY-SET	MK	KH	D	P-VIVA	F&S	III	
CO2	Conduct Identification of disease gene by DisGeNET.	PSY-SET	MK	KH	TUT, D	P-VIVA	F&S	III	
CO2	Conduct GO (Gene ontology) enhancement analysis by KEGG Pathway, R ratio.	PSY-SET	MK	KH	D	P-VIVA	F&S	III	
CO2	Conduct Network construction by STRING, PPI network, sytoscope.	PSY-SET	MK	KH	D	P-VIVA	F&S	III	
Topic 17 17. Preparations of digital herbarium									
CO8	Prepare digital herbarium of minimum 10 medicinal plants during field visit with all parts of the plant with geo-tag photos.	PSY-ADT	MK	SH	L_VC ,W,T UT,D	P-SUR,RK	F&S	III	
Topic 18 18. Demonstration of skills to identify the medicinal plants in the college garden									
CO8	Demonstrate identification features of college garden medicinal	PSY-	MK	KH	L_VC	P-VIVA,P-	F&S	III	

	plants for their morphology, taxonomical keys, regional flora with therapeutic uses.	GUD			,DG	EXAM			
CO8	Participate actively in Identification of Medicinal plants.	AFT-RES	MK	SH	DG	P-VIVA,P-EXAM	F&S	III	
Topic 19 19. Out campus visit (cultivated gardens & In-situ plant demonstration)									
CO8	Visit to observe the identification features of medicinal plants which are from cultivated or natural habitat / forest plant.	PSY-GUD	MK	KH	DG	P-VIVA	F&S	III	
Topic 20 20. Ekala dravya prayoga									
CO5	Perform the selection of Ekala dravya prayoga in various clinical conditions by masked case sheets.	PSY-ADT	MK	SH	CBL, ECE, D_BED,PRA	P-VIVA,P-EXAM,RK	F&S	III	H-RN
CO5	Appraise the value of selection of Ekala Dravya Prayoga in various clinical conditions by providing masked case sheets.	AFT-VAL	MK	SH	PBL, CBL, CD	P-VIVA,P-EXAM	F&S	III	H-RN

Table 4a: List of Practical

S.No	Name of practical	Term	Activity	Practical hrs
1	1. Assessment and Understanding the relation between Parthivatwa & subjective/ objective parametric tests	1	• **1.1 Assessment and Understanding the relation between Parthivatwa & subjective/ objective parametric tests** • Density (bulk) • Specific gravity (solid) • **Drugs to study** for e.g.- Asthishrnkhala, Sariva, Vidari, Maricha, Shatavari, Jambu, Godhuma & Ushira • **1.2 Assessment and Understanding the relation between Jaliyatwa & subjective/ objective parametric tests** • Viscosity • Specific gravity • Moisture content • **Drugs to study** for e.g.- Kumari, Vidari, Sariva, Shunthi, Ikshu, Usheera, Kamala & Apamarga • **1.3 Assessment and Understanding the relation between Aagneyatwa & subjective/ objective parametric tests** • pH • Moisture content • **Drugs to study** for e.g.: Shunthi, Shatavari, Maricha, Dhataki, Chitraka, Gokhura, Hingu & Chandana • **1.4 Assessment and Understanding the relation between Vayaviytwa & subjective/ objective parametric tests** • Fat content • Specific gravity • Density (bulk) • **Drugs to study** for e.g. : Usheera, Ashwagandha, Nimba, Vidari, Khadira, Tila, Jambu & Kapikacchu • **1.5 Assessment and**	10

			Understanding the relation between Aakashiyatwa & subjective/ objective parametric tests • Density (Bulk) • **Drugs to study** for e.g.: Usheera, Kumari, Apamarga, Jeeraka & Jatamansi	
2	2. Assessment of objective parametric measures of Guna	1	• **2.1 Assessment of objective parametric measures Guru & Laghu Guna** • Density (bulk) • Specific gravity (Liquid and solid) • Drugs to study for e.g. : **Guru:** Shatavari, Bala ; **Laghu:** Yava, Dhanyaka • **2.2 Assessment of objective parametric measures of Snigdha and Ruksha guna drugs** • Total fat content • Moisture content • Swelling index • **Drugs to study** for e.g. **:** **Snigdha:** Tila, Eranda ; **Ruksha:** Kullatha, Vidanga	12
3	3. Assessment of Rasa	1	**Assessment of Rasa based on classical symptoms for each rasa dravyas.** One Example For each rasa	6
4	4.Comparative organoleptic and macroscopic examination	1	• **Comparative organoleptic (Taste, Color, Smell, Sound, Touch) and macroscopic examination (Size, Shape, Fracture, External markings like lenticels, ridges, nodes, furrows, cracks, etc)of the following group of drugs.** • **a. Root:** Aswagandha, Chitraka,	23

			Manjistha, Musta, Shatavari, Vatsanabha, Yashtimadhu. • **b. Rhizome/Stolon:** Haridra, Katuki, Shunthi, Vacha. • **c. Stem:** Asthishrinkhala, Guduchi. • **d. Bark:** Arjuna, Ashoka, Kutaja, Nimba, Twak. • **e. Heart wood:** Beejaka, Chandana, Khadira. • **f. Leaf:** Kumari, Meshashringi, Vasa. • **g. Flower:** Dhataki, Kunkum (kesara), Lavanga. • **h. Fruit:** Amalaki, Aragavadha, Bhallataka, Bibhitaki, Gokshura, Haritaki, Madanphala, Maricha, Pippali, Vidanga. • **i. Phalaraja:** Kampillaka • **j. Seed:** Bakuchi, Ela, Eranda, Jyotishmati, Kapikacchu • **k. Unorganized drugs:** Guggulu, Hingu, Mocharasa • **l. Whole plant:** Apamarga, Bhrungaraja, Bhumyamalaki, Brahmi, Kalmegha, Mandukaparni. • **m. Galls:** Karkatshrungi	
5	5. Microscopic Identification of genuine and adulterated drug	1	• **Microscopic identification of genuine and adulterated drug, minimum 2 samples from Root/stem/leaf /bark/fruits.** • (E.g. Sariva/Manjishta/Vidanga/Maricha/Ashoka)	4
6	6. Demonstration of skills to identify the medicinal plants in the college garden.	1		10
7	7. Out campus visit (Cultivated gardens, Tissue culture lab, Herbaria, Pharmacognosy	1	• **General instructions regarding combined educational visit**	10

	lab, Quality control lab and Forest plant demonstration)		• Combined educational visit can be planned wherever feasible as, for **Dravyaguna**- Cultivated gardens, Tissue culture lab, Herbaria, Pharmacognosy lab, Forest plant demonstration ; f**or Agadatantra**- forensic lab, snake park, pollution control board and snake venum unit; f**or Swasthvrutta** -Yoga and naturopathy center , Milk dairy plant, Water Purification plant, Sewage treatment plant, Leprosy rehabilitation Centre & f**or Rasashastra-** GMP certified Lab , Drug Analysis Lab • **SOP for Out campus Field Visits** • **Theme-Based Visits**: Plan visits based on specific educational themes (Deshemani Ganas, Family wise), selecting locations relevant to the theme and collaborating with local experts. • **Dress Code**: Participants must wear jean paints and T shirts, closed-toe shoes, a hat or cap for sun protection, and weather-appropriate gear such as jackets or raincoats. • **Essential Materials**: Each participant should carry a water bottle, a stick (optional), materials for sample storage (newspaper, blotting paper, secateurs, plastic bags), a cap, goggles, and a packed lunch or snacks in a suitable container. • **Safety Precautions:** Conduct a safety briefing before the visit, outlining emergency procedures, collecting medical information, and emphasizing expected behaviors' during the trip. • **Itinerary**: Develop a detailed itinerary with activities and a timeline, considering the chosen theme and objectives of the visit. • **Public Address System (PA System)**: If necessary, provide a portable PA system with a	

			microphone, amplifier, and power source for effective communication with larger groups. • **Test the PA System**: Prior to the visit, ensure the PA system is in working order and audible, conducting necessary tests to guarantee functionality. • **Responsible Usage**: Use the PA system judiciously, speaking clearly and at an appropriate volume, while encouraging participants to utilize the system for questions or clarifications. • **Follow-up Activities**: Organize post-visit discussions and assignments to reinforce learning, encourage knowledge sharing, and facilitate deeper exploration of the theme. • **Review and Revise**: Regularly update and adapt this SOP to comply with safety standards, educational objectives, and local regulations.	
8	8. Dravya prayoga	1	• **8.1 (Part I) Demonstration of selecting appropriate Ekala dravya as per clinical conditions.** • **8.2 (Part II) Selection of Ekala dravya prayoga in various clinical conditions by providing masked case sheets per srotasa** (5 cases in each term)	12
9	9. Physico-chemical study	2	• **Physicochemical study of medicinal plant. (minimum 2 drugs)** • **a.** Foreign matter • b. Loss on drying • c. Ash value • d. Extracts	8

			• **Note: The same plant should be used for all the tests**	
10	10. Phytochemical	2	• **Preliminary phytochemical study of medicinal plant. (minimum 2 drugs)**	4
11	11. Thin Layer Chromatography (TLC) technique	2	• **TLC technique of medicinal plant (any one)**	2
12	12. Demonstration of skills to identify the medicinal plants in the college garden	2		10
13	13. Out campus visit (cultivated gardens & In-situ plant demonstration)	2		10
14	14. Ekala dravya prayoga	2	• **Selection of Ekala dravya prayoga in various clinical conditions by providing masked case sheets.** (5 cases in each term)	10
15	15. Different Cultivation technique including methods mentioned in Vrikshayurveda	2		6
16	16. Exercise on Network pharmacology	3	• **Exercise on Network Pharmacology** • **1st activity:** Identification (Data mining) active constituents by Pubmed, IMPPATor PubChem. • **2nd activity:** Target identification by BindingDB.	6

			• **3rd activity:** Identification of disease gene by DisGeNET. • **4th activity:** GO enhancement analysis by KEGG Pathway, R ratio. • **5th step:** Network construction by STRING, PPI network, sytoscope.	
17	17. Preparations of digital herbarium	3	• **Preparations of digital herbarium of minimum 10 drugs with all parts of the plant (with geo-tag photos) by compulsory field visit**	2
18	18. Demonstration of skills to identify the medicinal plants in the college garden	3		10
19	19. Out campus visit (cultivated gardens & In-situ plant demonstration)	3		10
20	20. Ekala dravya prayoga	3	**Selection of Ekala dravya prayoga in various clinical conditions by providing masked case sheets.**(5 cases in each term)	10
			Total Hr	**175**

Activity

CO	Topic name	Activity Details	Hours#
CO1,CO3	Dravyaguna Vigyana.	• **Group activity** – Assignments are to be given to the students to prepare 2-3 flash cards on importance of Dravyaguna Vigyana in clinical practice.	1

CO1,CO5,CO8	Dravya	• **Segregation** of dry drugs based on Panchabhoutika characteristics. Various Dravyas are given to the students for segregation of dravyas according to Panchabhoutik constitution • **Classify** live plants based on Panchabhoutika characteristics in garden. (Details mentioned in Rasavaisheshik Sutra 2 chapter 101-111) • **Quiz –** based on classifications of dravyas • **Brain storming** - Activity should be assigned to the students to search in samhitas related to classification of dravyas as Prayogabheda, Doshaghnabheda and Karmbheda. Prepare the list of specific assigned classification for group of students.	4
CO1,CO2,CO3	Guna Panchabhoutikatva, characteristics and classification.	• **Matching** of Gurvadi guna with its karma • **Animated Power point** Presentation on Guna. • **Brain storming** - To search in Chikitsasthana of samhitas regarding clinical application of Gurvadi guna and Paradi guna	2
CO1,CO2,CO3	Rasa	• **Game based activity** by closing the eyes they should ask to identify the taste • **Activity based learning** enlisting the dravyas of specific taste • **Matching activity** -Matching of specific Rasas with their Guna & Karma • **Making of Flash cards-** Cards with information regarding different concepts of Rasas	4

CO1,CO2,CO3	Vipak	• **Flash cards -** Preparing flash cards containing pictures of dravya to identify dravya and its vipaka • **Preparing charts** of 20 dravyas with ayathartha vipaka and yatharth vipaka	1
CO1,CO2,CO3	Virya	• **Talk and chalk activity** by students on Dwividha virya and ashtavidha virya. • **Making charts** of dravyas from Bhavaprakash nighantu regarding Dwividha virya- 25 Sheeta Virya dravyas & 25 Ushna Virya Dravyas.	2
CO1,CO2,CO3	Prabhav	• **Puzzle** – Segregating the dravyas based on Samanpratyayarabdha, Vichtrapratyayarabdha and Prabhava.	1
CO1	Interrelation of Rasa-Gun a-Virya-Vipaka-Prabhava with respect to their strength - Pharmacodynamics	• **Making flow charts** regarding the rules explained in relation with concepts of dravyaguna • **Group Discussion** - Interrelation of Rasa-Guna-Virya-Vipaka-Prabhava with respect to their strength - Pharmacodynamics	2
CO1,CO2,CO3,CO4 ,CO5	karma	• **Case base learning**-Taking different clinical conditions & selecting appropriate karma • **Think, Pair and share based activity**- Sepecific problem has to be given,	5

		student should be allowed to think and discuss about appropriate karmas • **Gamification-**Pairing Karma with the drugs. • **Role play for identification of specific karma-** Asking one student to enact & others to find out Karma • **Presentation-** On concept of Karma, types of karma & Individual Karma. • **Enlisting specific karma-**In relation to dravyas from Bruhatrayee & Sharangdhara samhita	
CO1,CO8	Karmas of Dashemani	• **Cramming** –Memorizing the dravyas from specific ganas • **Fish bowl activity** written chits of drugs picked by students and should say the name of the Gana • **Shloka recitation-** Shlokas of Dashemani Gana (Ch. Su. 4) • **Symposia-** Short discussion on various clinical applications of Dashemani Gana	3
CO4,CO9	Principles of General Pharmacology	• **Video:** Showing relevant videos regarding principles of pharmacology and mode of action • **Mobile based learning –**Searching about pharmacology in enlisted websites	1
CO1,CO3	Mishrak Gana	• **GBL**-Identification of mishrak gana by using clues of utility of specific mishrak gana from samhita and chikitsa grantha • **Matching** of dravyas with specific mishraka Gana • **Role play** –enacting individual and combined actions of composition for e.g. Triphala - Individulaly they should enact	2

		as Haritaki, Bibhitaki and Aamalaki explaing their karmas, then they should come together depicting Triphala. • **Self-directed learning-** Mobile based learning on Mishraka Gana	
CO1	Nomenclature of dravya as per Nighantu, Vedic taxonomy and botany	• **Bulletin boards :** Highlighting significant points of nomenclature • **Demo in garden :** Demonstration of the dravyas on the basis of various criteria's of nomenclature • **Symposium** by making groups of specific criteria for nomenclature and asked to present synonyms based on that particular criteria allotted to the group e.g. Upama , Rudhi, Prabhav, Deshokti, Swabhavatha, Lanchana & Guna	2
CO1,CO5	Prashasta Bheshaja, BheshajaPariksha and drug evaluation method with correlation as per Pharmacognosy	• **Read aloud :**Student come on the Dias and read with loud voice • **Self -directed learning** - Charak Samhita Vimansthana Chapter 8	2
CO1,CO7	Abhavapratinidhidravya (substitutes)	• **Self-directed learning**: Self study on Abhavapratinidhidravya (substitutes) from Bhavaprakasha	1
CO2,CO6	Classifications and techniques of aqueous and alcoholic extracts	• **Demo in lab** • **Video**	2
CO2	Adverse drug reaction and Pharmacovigilance with recent updates	• **PBL**: Story telling about reported cases	2

		• **Survey :** visit to pharmacovigilance cell at institution • **Guest lecture :** Activities of pharmacovigilance cell	
CO8	Vrikshayurveda and ethnomedicine	• **Videos**- Showing videos on cultivation practices and Ethnomedicine	1
CO2	Network Pharmacology & Bioinformatics	• **Video** • **Presentation**	1
CO5	**Bheshajavacharaniya**	• **Making charts** on Various Rasa dravya indicated in specific vyadhis for eg. • **Tikta rasa** in Jvara & Kushtha, • **Katu rasa** in Amavata, • **Kashaya rasa** in Pakwatisara, and Raktastambhana, • **Madhur rasa** in Dhatu kshya janya vyadhi , • **Amla & Lavana rasa** in Udavarta, Udara, Gulma,also used as Agnideepana, Mudhavatanulomana, Pachana	6
CO2,CO3,CO4,CO5 ,CO7,CO8	**2.Dravya (Drug) Nama-Guna-Karma Jnana**	• **Game base activity-** Activity based learning as the chits are prepared of different karmas , those are circulated among the students, once the circulation stops then the student with the chit will be asked to read the karma mentioned in the chit and to explain with examples. • **CBL** (Case based learning) **and PBL** (Problem based learning) activities taken for understanding of Karma in specific clinical scenario	08

		• **Segregation of dravyas** mentioned in syllabus according to Dashemani Gana • **Searching of** Mishrak gana from samhita and chikitsa granths for its utility • **Collecting information** about Grahya and Agahya dravyas mentioned in the syllabus with their characterestics	
CO2,CO3,CO4,CO5 ,CO7,CO8	**3.Dravya (Drug) Nama-Guna-Karma Jnana**	• **Matching** Rasapanchak, Rogaghnata, Agryakarma of dravya • **Making of charts** regarding Aamayika Prayogas, Agrya Karma & Specific Kalpana • **Case based activity**- one particular disease & suitable plants in order • **Critical reading** with the help of different indexed research articles • **Quiz**	17
CO2,CO3,CO4,CO5 ,CO7,CO8	**3.Dravya (Drug) Nama-Guna-Karma Jnana**	• Moc practical - • 1) 15 dry & 15 wet **sample dravya spotting test** • **Test** should include at least one each from Leaf, Stem, Root, Rhizome,Gall, Flower, Fruit , Seed, Bark & Resin. • Each spot should be solved in 1 minute so 30 minutes activity should be conducted. • 2) **Skill based assessment -**There shall be three components in skill assessment • A. Identify and separate Grahya & Agrahya of given sample • B. Identifying and grouping of drugs of given Mishraka Gana • C. Understand the clinical scenario and identify five suitable single drug • **Instructions:** • Spotting stations are to be numbered as per the batch. Each spotting station contain: A. Mixture of Grahya & Agrahya B. Name of Misraka Gana and	05

		C. Clinical Scenario. Students are allotted with the spotting station by lottery method. • **Arrangement of Spotting Stations:** • A. Identify and separate Grahya & Agrahya of Given Sample: Sufficient quantity (approximately 20 gm of Vidanga & Maricha) of mixture of Grahya and Agrahya dravya to be provided. There shall be two empty bowels each one labelled as 'Grahya' and 'Agrahya'. Students are asked to separate the given sample into Grahya and Agrahya. There shall be different drugs for each station. • B. Identifying and grouping of drugs of given Misraka Gana: Each station shall contain one label containing name of the Misraka Gana with question 'Recollect the drugs belonging to the given Misraka Gana, identify those drugs, collect and make a group. There shall be empty bowl of sufficient size as per the given Gana for collection of drugs. • C. Understand the clinical scenario and identify five suitable 5 single drugs: Provide the clinical scenario in not less than 100 words and not more than 200 words with or without investigation reports shall be provided at each spotting station (preferably separate cases for each station). Students are asked to go through the scenario and understand the clinical conditions , select 1 single drug, identify, collect and place it in the bowl given for the same. Select five suitable drugs and write as per preference base.	

Hours indicated are included in calculations of Table 3 and 4

Table 5- Teaching learning method

Sr No	Teaching learning methods in the course	No of Activities
1	Lecture	13

2	Lecture with Power point presentation	100
3	Lecture & Group Discussion	35
4	Lecture with Video clips	19
5	Discussions	42
6	Brainstorming	7
7	PBL	14
8	CBL	7
9	Project-Based Learning	3
10	TBL	3
11	Team project work	5
12	Flipped classroom	22
13	Blended Learning	13
14	Edutainment	4
15	Mobile learning	7
16	Role plays	3
17	Self-directed learning	14
18	Game-Based Learning	6
19	Library Session	18
20	Peer learning	16
21	Recitation	1
22	Tutorial	2
23	Presentations	20
24	Demonstration	1

These are overall teaching learning methods listed in Table 3 and 4. Teachers can select the best possible method amongst the given methods as per objective, available time etc.

Table 6: Assessment Summary: Assessment is subdivided in A to H points

6 A-Number of Papers and Marks Distribution

Subject Code	Papers	Theory	Practical/Clinical Assessment					Grand Total
			Practical	Viva	Elective	IA	Sub Total	

AyUG-DG	2	200	100	70	-	30	200	400

6 B - Scheme of Assessment (formative and Summative)

PROFESSIONAL COURSE	DURATION OF PROFESSIONAL COURSE		
	First Term (1-6 Months)	**Second Term (7-12 Months)**	**Third Term (13-18 Months)**
Second	3 PA & First TT	3 PA & Second TT	3 PA & UE**

PA: Periodical Assessment; **TT:** Term Test; **UE:** University Examinations.

** University Examination shall be on entire syllabus

6 C - Calculation Method for Internal assessment Marks

TERM	PERIODICAL ASSESSMENT*					TERM TEST**	TERM ASSESSMENT	
	A 1	B	C	D	E	F	G	H
	1 (15 Marks)	2 (15 Marks)	3 (15 Marks)	Average (A+B+C/ 3)	Converted to 30 Marks (D/15*30)	Term Test (Marks converted to 30)	Sub Total _/60 Marks	Term Ass essment (…./30)
FIRST							E+F	(E+F)/2
SECOND							E+F	(E+F)/2
THIRD						NIL		E
Final IA	Average of Three Term Assessment Marks as Shown in 'H' Column.							
	Maximum Marks in Parentheses *Select an Evaluation Method which is appropriate for the objectives of Topics from the Table 6 D for Periodic assessment. Conduct 15 marks assessment and enter marks in A, B, and C. ** Conduct Theory (100 Marks)(MCQ(20*1 Marks), SAQ(8*5), LAQ(4*10)) and Practical (100 Marks) Then convert to 30 marks.							

6 D - Evaluation Methods for Periodical Assessment

S. No	Evaluation Methods
1	Activities Indicated in Table 3 - Column G3 as per Indicated I, II or III term in column I3

Evaluation Methods in MSE

1. Practical / Clinical Performance
2. Viva Voce, MCQs, MEQ (Modified Essay Questions/Structured Questions)
3. Open Book Test (Problem Based)
4. Summary Writing (Research Papers/ Samhitas)
5. Class Presentations; Work Book Maintenance
6. Problem Based Assignment
7. Objective Structured Clinical Examination (OSCE), Objective Structured Practical Examination (OPSE), Mini Clinical Evaluation Exercise (Mini-CEX), Direct Observation of Procedures (DOP), Case Based Discussion (CBD)
8. Extra-curricular Activities, (Social Work, Public Awareness, Surveillance Activities, Sports or Other Activities which may be decided by the department).
9. Small Project etc.

6 E Question Paper Pattern

II PROFESSIONAL BAMS EXAMINATIONS
AyUG-DG
PAPER-1
Time: 3 Hours Maximum Marks: 100
INSTRUCTIONS: All questions compulsory

		Number of Questions	**Marks per question**	**Total Marks**
Q 1	MULTIPLE CHOICE QUESTIONS (MCQ)	20	1	20
Q 2	SHORT ANSWER QUESTIONS (SAQ)	8	5	40
Q 3	LONG ANSWER QUESTIONS (LAQ)	4	10	40
				100

Similar for Paper II

6 F Distribution of theory examination

Paper 1 Fundamental Dravyaguna						
Sr. No	**A List of Topics**	**B Term**	**C Marks**	**MCQ (1 Mark)**	**SAQ (5 Marks)**	**LAQ (10 Marks)**
1	**1.Dravyaguna Vigyana**	1	1	Yes	No	No
2	**2.Dravya**	1	6	Yes	Yes	No
3	**3. Guna**	1	11	Yes	No	Yes
4	**4. Rasa**	1	11	Yes	No	Yes
5	**5. Vipaka**	1	6	Yes	Yes	No
6	**6. Virya**	1	6	Yes	Yes	No
7	**7. Prabhava**	1	5	No	Yes	No
8	**8. Interrelation of Rasa-Guna-Virya-Vipaka-Prabhava**	1	1	Yes	No	No
9	**9. Karma**	1	11	Yes	No	Yes
10	**10. Karmas of Dashemani Gana**	1	5	No	Yes	No
11	**11. Principles of General Pharmacology**	3	20	Yes	Yes	Yes
12	**12. Mishraka Gana**	3	6	Yes	Yes	No
13	**13. Nomenclature of dravya as per Nighantu, Vedic taxonomy and Botany**	3	1	Yes	No	No
14	**14. Prashasta Bheshaja, Bheshaja Pariksha and drug evaluation method with correlation as per Pharmacognosy**	3	1	Yes	No	No
15	**15. Dravyasangrahana and Drug collection methods as per GFCP (Good Field collection**	3	1	Yes	No	No

	practices)					
16	**16. GCP (Good cultivation practices), seed bank, conservation of medicinal plants, knowledge about RET (Rear, Endangered & Threatened) medicinal plants.**	3	1	Yes	No	No
17	**17. Abhava Pratinidhi Dravya (substitutes)**	3	1	Yes	No	No
18	**18. Classifications and techniques of aqueous and alcoholic extracts**	3	1	Yes	No	No
19	**19. Adverse drug reaction and Pharmacovigilance with recent updates**	3	1	Yes	No	No
20	**20. NMPB (National Medicinal Plant Board), CCRAS (Central Council of Research in Ayurveda Sciences), API (Ayurvedic Pharmacopeia of India), GCTM (Global Centre for Traditional Medicine), PCIMH (Pharmacopeia Commission of Indian Medicine and Homeopathy)**	3	1	Yes	No	No
21	**21. Vrikshayurveda and Ethno-medicine**	3	1	Yes	No	No
22	**22. Network pharmacology and Bioinformatics**	3	2	Yes	No	No
Total Marks			**100**			

Paper 2 Applied Dravyaguna						
Sr. No	**A List of Topics**	**B Term**	**C Marks**	**MCQ (1 Mark)**	**SAQ (5 Marks)**	**LAQ (10 Marks)**
23	**1. Bheshajavacharaniya (Criteria's to be considered for selection of drugs in vyadhis)**	2	5	Yes	No	No
24	**2.1 Dravya (Drug) Nama-Guna-Karma Jnana**	2	55	Yes	Yes	Yes

25	**2.2 Dravya (Drugs) Nama -Guna-Karma-Jnana**	3	40	Yes	Yes	Yes
Total Marks			**100**			

6 G Blue print of paper I & II

Paper No:1		
Question No	**Type of Question**	**Question Paper Format**
Q1	**Multiple choice Questions** **20 Questions** **1 mark each** **All compulsory** **Must know part - 15 MCQ** **Desirable to know - 3 MCQ** **Nice to know part - 2 MCQ**	**1.** 1.Dravyaguna Vigyana **2.** 2.Dravya **3.** 3. Guna **4.** 4. Rasa **5.** 5. Vipaka **6.** 6. Virya **7.** 8. Interrelation of Rasa-Guna-Virya-Vipaka-Prabhava **8.** 12. Mishraka Gana / 9. Karma **9.** 11. Principles of General Pharmacology **10.** 12. Mishraka Gana **11.** 13. Nomenclature of dravya as per Nighantu, Vedic taxonomy and Botany **12.** 14. Prashasta Bheshaja, Bheshaja Pariksha and drug evaluation method with correlation as per Pharmacognosy **13.** 15. Dravyasangrahana and Drug collection methods as per GFCP (Good Field collection practices) **14.** 16. GCP (Good cultivation practices), seed bank, conservation of medicinal plants, knowledge about RET (Rear, Endangered & Threatened) medicinal plants. **15.** 17. Abhava Pratinidhi Dravya (substitutes) **16.** 18. Classifications and techniques of aqueous and alcoholic extracts **17.** 19. Adverse drug reaction and Pharmacovigilance with recent updates **18.** 20. NMPB (National Medicinal Plant Board), CCRAS (Central Council of Research in Ayurveda Sciences), API (Ayurvedic Pharmacopeia of India), GCTM (Global Centre for Traditional Medicine), PCIMH (Pharmacopeia Commission of Indian Medicine and Homeopathy) **19.** 21. Vrikshayurveda and Ethno-medicine **20.** 22. Network pharmacology and Bioinformatics
Q2	**Short answer Questions** **Eight Questions** **5 Marks Each**	**1.** 2.Dravya **2.** 5. Vipaka **3.** 6. Virya **4.** 7. Prabhava **5.** 10. Karmas of Dashemani Gana

	All compulsory **Must know - 7 SAQ** **Desirable to know - 1 SAQ** **No questions on Nice to know**	**6.** 11. Principles of General Pharmacology **7.** 11. Principles of General Pharmacology **8.** 12. Mishraka Gana
Q3	**Long answer Questions** **Four Questions** **10 marks each** **All compulsory** **All questions on must know. No Questions on Nice to know and Desirable to know**	**1.** 3. Guna **2.** 4. Rasa **3.** 9. Karma **4.** 9. Karma
Paper No:2		
Question No	**Type of Question**	**Question Paper Format**
Q1	**Multiple choice Questions** **20 Questions** **1 mark each** **All compulsory** **Must know part - 15 MCQ** **Desirable to know - 3 MCQ** **Nice to know part - 2 MCQ**	**1.** 2.2 Dravya (Drugs) Nama -Guna-Karma-Jnana **2.** 2.2 Dravya (Drugs) Nama -Guna-Karma-Jnana **3.** 2.2 Dravya (Drugs) Nama -Guna-Karma-Jnana **4.** 2.2 Dravya (Drugs) Nama -Guna-Karma-Jnana **5.** 2.2 Dravya (Drugs) Nama -Guna-Karma-Jnana **6.** 2.2 Dravya (Drugs) Nama -Guna-Karma-Jnana **7.** 2.2 Dravya (Drugs) Nama -Guna-Karma-Jnana **8.** 2.2 Dravya (Drugs) Nama -Guna-Karma-Jnana **9.** 2.2 Dravya (Drugs) Nama -Guna-Karma-Jnana **10.** 2.2 Dravya (Drugs) Nama -Guna-Karma-Jnana **11.** 2.2 Dravya (Drugs) Nama -Guna-Karma-Jnana **12.** 2.2 Dravya (Drugs) Nama -Guna-Karma-Jnana **13.** 2.2 Dravya (Drugs) Nama -Guna-Karma-Jnana

		14. 2.2 Dravya (Drugs) Nama -Guna-Karma-Jnana **15.** 2.2 Dravya (Drugs) Nama -Guna-Karma-Jnana **16.** 2.2 Dravya (Drugs) Nama -Guna-Karma-Jnana **17.** 2.2 Dravya (Drugs) Nama -Guna-Karma-Jnana **18.** 2.2 Dravya (Drugs) Nama -Guna-Karma-Jnana **19.** 2.2 Dravya (Drugs) Nama -Guna-Karma-Jnana **20.** 2.2 Dravya (Drugs) Nama -Guna-Karma-Jnana
Q2	**Short answer Questions** **Eight Questions** **5 Marks Each** **All compulsory** **Must know - 7 SAQ** **Desirable to know - 1 SAQ** **No questions on Nice to know**	**1.** 2.2 Dravya (Drugs) Nama -Guna-Karma-Jnana **2.** 2.1 Dravya (Drug) Nama-Guna-Karma Jnana **3.** 2.2 Dravya (Drugs) Nama -Guna-Karma-Jnana **4.** 2.1 Dravya (Drug) Nama-Guna-Karma Jnana **5.** 2.2 Dravya (Drugs) Nama -Guna-Karma-Jnana **6.** 2.1 Dravya (Drug) Nama-Guna-Karma Jnana **7.** 2.2 Dravya (Drugs) Nama -Guna-Karma-Jnana **8.** 2.1 Dravya (Drug) Nama-Guna-Karma Jnana
Q3	**Long answer Questions** **Four Questions** **10 marks each** **All compulsory** **All questions on must know. No Questions on Nice to know and Desirable to know**	**1.** 2.2 Dravya (Drugs) Nama -Guna-Karma-Jnana **2.** 2.1 Dravya (Drug) Nama-Guna-Karma Jnana **3.** 2.2 Dravya (Drugs) Nama -Guna-Karma-Jnana **4.** 2.1 Dravya (Drug) Nama-Guna-Karma Jnana

6 H Distribution of Practical Exam

S.No	Heads	Marks
1	1) **15 dry & 15 wet sample dravya spotting test- 30 minutesTest** should include at least one each from Leaf, Stem, Root, Rhizome,Gall, Flower, Fruit , Seed, Bark & Resin.	30
2	2) **Skill based assessment -**There shall be three components in skill assessment A. Identify and separate Grahya & Agrahya of given sample- 10 minutes B. Identifying and grouping of drugs of given Mishraka Gana- 10 minutes C. Understand the clinical scenario and identify five suitable single drug- 10 minutes **Instructions:** • Spotting stations are to be numbered as per the batch. Each spotting station contain: A. Mixture of Grahya & Agrahya B. Name of Misraka Gana and C. Clinical Scenario. Students are allotted with the spotting station by lottery method. **Arrangement of Spotting Stations:** A. Identify and separate Grahya & Agrahya of Given Sample: Sufficient quantity (approximately 20 gm of Vidanga & Maricha) of mixture of Grahya and Agrahya dravya to be provided. There shall be two empty bowels each one labelled as 'Grahya' and 'Agrahya'. Students are asked to separate the given sample into Grahya and Agrahya. There shall be different drugs for each station. B. Identifying and grouping of drugs of given Misraka Gana: Each station shall contain one label containing name of the Misraka Gana with question 'Recollect the drugs belonging to the given Misraka Gana, identify those drugs, collect and make a group. There shall be empty bowl of sufficient size as per the given Gana for collection of drugs. C. Understand the clinical scenario and identify five suitable 5 single drugs: Provide the clinical scenario in not less than 100 words and not more than 200 words with or without investigation reports shall be provided at each spotting station (preferably separate cases for each station). Students are asked to go through the scenario and understand the clinical conditions , select 1 single drug, identify, collect and place it in the bowl given for the same. Select five suitable drugs and write as per preference base.	30
3	3. QC practical (30 minutes)-Performance based components • 3.1. Comparison Macroscopic evaluation of one genuine and one	40

	adulterant sample -10 marks- 15 minutes • 3.2. Panchamahabhoutikatwa assessment by parametric measures by pH of a given sample phant/ Kwatha - (Concern drug Phant / Kwatha should be prepared by college for pH analysis)- 10 marks - 15 minutes • 3.3. Panchabhaoutikatwa assessment by parametric measures by Specific Gravity of a given sample Phat/ Kwatha (Concern drug Phant/ Kwatha should be prepared by college for Specific Gravity)- 20 marks- 30 minutes	
4	4. Viva voce (10 minutes per student)Questions should be asked on following topics - • 1. Fundamentals (Dravya, Guna, Rasa, Vipaka, • Veerya & Prabhav)- 3 questions- 15 marks • 2. Karmas, Dashemani, Mishrak Gana- 3 questions- 15 marks • 3. Pharmacology & Network pharmacology- 3 questions- 15 marks • 4. Clinical application of drugs- 3 questions - 15 marks • 5. Viva on practical records -06 marks • 6. Communication skill (4 marks)	70
5	5. Internal Assessment	30
Total Marks		**200**

References Books/ Resources

S.No	Book	Resources
1	Dravya Guna Shastram	Vaidya G.A. Phadke, Pradnya Mudranalaya, Vaidya Vamanrao Deenanath Shuddhaaayurved Pathyakrama Samitee, Dadabhai Navroji Path, Mumbai
2	Bhavaprakasha	Sri Brahmasankara Mishra and Sri Rupalalaji vaishya, Chaukhamba Sanskrit Series office, Varanasi,
3	Aushadhi Vigyna Shastra (Ayurvedic Pharmacology)	Sri. Vishvanatha Dwidevi ,Shri Baidyanath Ayurved Bhavan Pvt Ltd; Nagpur
4	Ayurvediya Aushadkarma Vigyana	Acharya V.J. Thakar, Gujurat Ayurveda University, Jamnagar
5	Bhava Prakash Nighantu	Vd. Krishna Chandra Chunekar Commentary, Chaukhambha Sanskrit Sansthan, Varanasi
6	Classical Uses of Medicinal Plants	Acharya Priyavrata Sharma ,Chaukhamba Visvabharati, Varanasi
7	Some Controversial Drugs in Indian Medicine	Dr. Bapalal, Vaidya,Chaukhambha Orientalia, Varanasi
8	Dravyaguna Kosha	Acharya Priyavrata Sharma, Chaukhambha Orientalia, Delhi
9	Dravyaguna Vigyana (Vol.1-3)	Dr. Gyanendra Pandey, Chaukhambha Krishnadas Academy, Varanasi
10	Dravyaguna Vigyana (Vol. 1-2)	Acharya Yadavji Tikramji,Baidyanath Ayurved Bhavan Ltd
11	Dravyaguna Vigyana (Vol. 1-5)	Acharya Priyavrata Sharma, Chaukhambha Bharti Academy, Varanasi
12	Nighantu Adarsh (Vol. 1-2)	Vd.G.Bapa Lal, Chaukhambha Bharti Academy, Varanasi
13	Ayurvedic Pharmacology & Therapeutic Uses of Medicinal Plants Dravyagunavignyan	Vaidya V M Gogte, Chaukhambha Publications, New Delhi
14	Dravyagunavijnana(Part I and II)	Prof.D.S.Lucas, Chaukhamba Visvabharati, Varanasi
15	Glossary of Vegetable Drugs in Brihattrayi	Thakur Balwant Singh & Vd. Krishna Chandra Chunekar,Chaukhamba Amarbharti Prakashakan, Varanasi
16	Introduction to Dravyaguna(English)	Acharya Priyavrata Sharma ,Chaukhambha Orientalia, Varanasi
17	A Text Book of Dravyaguna Vijnana (Vol 1,2 & 3)	Dr. Prakash L.Hegde and Dr. Harini A.,Chaukhambha Publications, New Delhi
18	Raspanchaka	Prof. Shiv Charan Dhyani,Chaukhambha Krishnadas Academy, Varanasi

19	Dravyaguna Siddhanta	Prof. Shiv Charan Dhyani,Chaukhambha Krishnadas Academy, Varanasi
20	The Ayurvedic Pharmacopoeia of India, Part I Vol. 1-VII	Ministry of AYUSH. India, New Delhi
21	Medicinal Plants used in Ayurveda (2nd Edition)	Rashtriya Ayurveda Vidyapeeth, New Delhi
22	Plants of Bhavaprakash (English)	Prof.K.C.Chunekar & Dr. N.P. Hota,Rashtriya Ayurveda Vidyapeeth, New Delhi.
23	Database of Medicinal Plants used in Ayurveda Vol. 1 to 8	CCRAS New Delhi
24	A Text Book of Dravyaguna Vijnana (Vol.1 to 2)	Dr. J. L. N Sastry and Dr. Tanuja M Nesari.
25	Dravyaguna Vigyana (Vol.1to 2)	Dr. Manasi Deshpande and Dr Arvind Deshpande, *Chaukhamba Sanskrit* Pratisthan. New Delhi
26	Essentials of Medical Pharmacology	K.D.Tripathi. **Jaypee Brothers Medical Publishers (P) Ltd**
27	Pharmacological basis of Medical Practice	Goodman & Gillman,McGraw-Hill Education
28	Pharmacology and Pharmacotherapeutics	Satoskar Bhandarkar & Ainapure,Popular Prakashan Mumbai
29	Textbook of Pharmacognosy	Trease & Evans, Elsevier publication
30	Textbook of Pharmacognosy	Tyler, Brady & Robber,Lea & Febiger, USA
31	Quality Control of Herbal Drugs: An Approach to Evaluation of Botanicals	Pulok K Mukharjee, Elsevier
32	Ausadhinamarupa vijnanam (Vol. 1 and 2)	Dr Sanjeev Kumar Lale.,Mr. Hemraj Lale, Indore
33	Practical Pharmacognosy	Dr. K. R.. Khandelwal and Dr. Vrunda Sethi , Nirali Prakashan Pune
34	Pharmacognosy	S.B. Gokhale, C.K. Kokate and A.P. Purohit
35	Botany of commonly used medicinal Plants with Diagnostic keys	Dr. Hema Sane and Dr. Yogini Kulkarni. Vision Publication Pune
36	Basic Bioinformatics	S Gladis Hepsyba Helen,MJP Publishers
37	Pharmacovigilance in Ayurveda	Manjunath Ajanal, B S Prasad, Shreddha U Nayak, Chaukhambha Prakashak, Varanasi
38	Cultivation Of Medicinal And Aromatic Crops	Azhar Ali Farooqi, B. S. Sreeramu, Universities Press (India) Pvt. Ltd. Hyderabad

39	WHO Guidelines on Good Agricultural and Collection Practices (GACP) for Medicinal Plants	World Health Organization,World Health Organization, Geneva
40	Medicinal Plants: Biodiversity, Sustainable Utilization and Conservation	K. Thammasiri, Chunlin Long, Henrik Lutken, Shaik Mahammad Khasim,Springer Link
41	Network Pharmacology	Shao Li, Springer Link
42	Vrikshayurveda - Ancient Science of Plant Life and Plant Care	S. Rajasekharan, G.S. Unnikrishnan Nair, Kerala State Biodiversity Board, Kerala
43	Evidence-Based Validation of Herbal Medicine - Translational Research on Botanicals	Pulok K. Mukherjee,Elsevier Science
44	Research updates of Gurvadiguna	• 1. Vaidyabhushanam K. Raghavan Tirumulpad. Rasavaiseshika. (Text with commentary). Arya Vaidya Sala, Kottakkal Malappuram Dist., Kerala. • 2. Interactive workshop on Ayurveda (Dravyaguna), Published by Rashtriya Ayurveda Vidyapeetha, New Delhi. • 3. Mishra S, Dwivedi RR, Ravishankar B. Conceptual and applied study of Snigdha and Ruksa Guna with special reference to Rasa-raktagata Sneha (hyperlipidemia). Ayu. 2011 Apr;32(2):200-6. • 4. Nair JU, Vyas HA, Nariya MB. An experimental study to evaluate *Gunasankarya* (combination of properties). Ayu. 2021 Oct-Dec;42(4):169-174. • 5. Gupta, Monika & Gudipudi, Sarvabhouma & Pujar, Rashmi & Gopikrishna, S. (2019). Clinical aspect of Guna Siddhanta with special reference to Trisutra Ayurveda. 6. 2407-2414.
45	Research updates of Paradiguna	• 1. Vaidyabhushanam K. Raghavan Tirumulpad. Rasavaiseshika. (Text with commentary). Arya Vaidya Sala, Kottakkal Malappuram Dist., Kerala. • 2. Interactive workshop on Ayurveda (Dravyaguna), Published by Rashtriya Ayurveda Vidyapeetha, New Delhi. • 3. Gupta, Monika & Gudipudi, Sarvabhouma & Pujar, Rashmi & Gopikrishna, S. (2019). Clinical aspect of Guna Siddhanta with special reference to Trisutra Ayurveda. 6. 2407-2414.

46	Research updates of Shadrasa	• 1. Vaidyabhushanam K. Raghavan Tirumulpad. Rasavaiseshika. (Text with commentary). Arya Vaidya Sala, Kottakkal Malappuram Dist., Kerala. • 2. Interactive workshop on Ayurveda (Dravyaguna), Published by Rashtriya Ayurveda Vidyapeetha, New Delhi. • 3. Standard Protocol for quality assessment of Raw medicinal plants materials on the basis of Rasa. • Ref: https://aiia.gov.in/wp-content/uploads/2021/12/RASA.pdf • 4. Rath SK, Panja AK, Nagar L, Shinde A. The scientific basis of rasa (taste) of a substance as a tool to explore its pharmacological behavior. Anc Sci Life. 2014 Apr-Jun;33(4):198-202. • 5. Gilca M, Dragos D. Extraoral Taste Receptor Discovery: New Light on Ayurvedic Pharmacology
47	Research updates of Vipaka	• 1. Vaidyabhushanam K. Raghavan Tirumulpad. Rasavaiseshika. (Text with commentary). Arya Vaidya Sala, Kottakkal Malappuram Dist., Kerala. • 2. Interactive workshop on Ayurveda (Dravyaguna), Published by Rashtriya Ayurveda Vidyapeetha, New Delhi. • 3. Ranade AV, Shirolkar A, Pawar SD. Gut microbiota: One of the new frontiers for elucidating fundamentals of *Vipaka* in Ayurveda. Ayu. 2019 Apr-Jun;40(2):75-78.
48	Research updates of Virya	• 1. Vaidyabhushanam K. Raghavan Tirumulpad. Rasavaiseshika. (Text with commentary). Arya Vaidya Sala, Kottakkal Malappuram Dist., Kerala. • 2. Interactive workshop on Ayurveda (Dravyaguna), Published by Rashtriya Ayurveda Vidyapeetha, New Delhi.

49	Research updates of Prabhava	• 1. Vaidyabhushanam K. Raghavan Tirumulpad. Rasavaiseshika. (Text with commentary). Arya Vaidya Sala, Kottakkal Malappuram Dist., Kerala. • 2. Interactive workshop on Ayurveda (Dravyaguna), Published by Rashtriya Ayurveda Vidyapeetha, New Delhi.
50	Research updates of Karma	• 1. Vaidyabhushanam K. Raghavan Tirumulpad. Rasavaiseshika. (Text with commentary). Arya Vaidya Sala, Kottakkal Malappuram Dist., Kerala. • 2. Interactive workshop on Ayurveda (Dravyaguna), Published by Rashtriya Ayurveda Vidyapeetha, New Delhi.

Abbreviations

Assessment

S.No	Short form	Discription
1	T-EMI	Theory extended matching item
2	T- EW	Theory Essay writing
3	T- MEQs	Theory MEQs
4	T-CRQs	Theory CRQs
5	T-CS	Theory case study
6	T-OBT	Theory open book test
7	P-VIVA	Practical Viva
8	P-REC	Practical Recitation
9	P-EXAM	Practical exam
10	PRN	Presentation
11	P-PRF	Practical Performance
12	P-SUR	Practical Survey
13	P-EN	Practical enact
14	P-RP	Practical Role play
15	P-MOD	Practical Model
16	P-POS	Practical Poster
17	P-CASE	Practical Case taking
18	P-ID	Practical identification
19	P-PS	Practical Problem solving
20	QZ	Quiz
21	PUZ	Puzzles
22	CL-PR	Class Presentation,
23	DEB	Debate
24	WP	Word puzzle
25	O-QZ	Online quiz

26	O-GAME	Online game-based assessment
27	M-MOD	Making of Model
28	M-CHT	Making of Charts
29	M-POS	Making of Posters
30	C-INT	Conducting interview
31	INT	Interactions
32	CR-RED	Critical reading papers
33	CR-W	Creativity Writing
34	C-VC	Clinical video cases,
35	SP	Simulated patients
36	PM	Patient management problems
37	CHK	Checklists
38	OSCE	OSCE
39	OSPE	OSPE,
40	Mini-CEX	Mini-CEX
41	DOPS	DOPS
42	CWS	CWS
43	RS	Rating scales
44	RK	Record keeping
45	COM	Compilations
46	Portfolios	Portfolios
47	Log book	Log book
48	TR	Trainers report
49	SA	Self-assessment
50	PA	Peer assessment
51	360D	360-degree evaluation
52	TT-Theory	Theory
53	PP-Practical	Practical
54	VV-Viva	Viva

Domain

S.No	Short form	Discription
1	CK	Cognitive/Knowledge
2	CC	Cognitive/Comprehension
3	CAP	Cognitive/Application
4	CAN	Cognitive/Analysis
5	CS	Cognitive/Synthesis
6	CE	Cognitive/Evaluation
7	PSY-SET	Psychomotor/Set
8	PSY-GUD	Psychomotor/Guided response
9	PSY-MEC	Psychomotor/Mechanism
10	PSY-ADT	Psychomotor Adaptation
11	PSY-ORG	Psychomotor/Origination
12	AFT-REC	Affective/ Receiving
13	AFT-RES	Affective/Responding
14	AFT-VAL	Affective/Valuing
15	AFT-SET	Affective/Organization
16	AFT-CHR	Affective/ characterization

T L method

S.No	Short form	Discription
1	L	Lecture
2	L&PPT	Lecture with Power point presentation
3	L&GD	Lecture & Group Discussion
4	L_VC	Lecture with Video clips
5	DIS	Discussions
6	BS	Brainstorming
7	IBL	Inquiry-Based Learning
8	PBL	PBL
9	CBL	CBL
10	PrBL	Project-Based Learning
11	TBL	TBL
12	TPW	Team project work
13	FC	Flipped classroom
14	BL	Blended Learning
15	EDU	Edutainment
16	ML	Mobile learning
17	ECE	ECE
18	SIM	Simulation
19	RP	Role plays
20	SDL	Self-directed learning
21	PSM	Problem solving method
22	KL	Kinesthetic Learning
23	W	Workshops
24	GBL	Game-Based Learning
25	D-M	Demo on Model

26	LS	Library Session
27	PL	Peer learning
28	RLE	Real life experience
29	REC	Recitation
30	SY	Symposium
31	TUT	Tutorial
32	PER	Presentations
33	PT	Practical
34	XRay	X ray identification
35	CD	Case diagnosis
36	LRI	Lab report interpretation
37	DA	Drug analysis
38	D	Demonstration
39	D_BED	Demonstration bedside
40	D_L	Demonstration Lab
41	DG	Demonstration Garden
42	FV	Field visit
43	PRA	Practical

Practical Record Book

For

Subject – Dravyaguna Vigyana

Year – 2nd year B.A.M.S.

(Name of the College)

(Approved by –National Commission for Indian System of Medicines, New Delhi &

Name of the University)

Name of the department

Batch- _____

Certificate

This is to certify that, Mr. / Ms. _____, Enrollment Number- _____ has satisfactorily completed the course of Practicals in (Subject Name) prescribed by the (Name of University) as a part of the Second Professional B.A.M.S. Course.

Examination Seat No.: _____

Date of Examination- _____

Sign. Of Internal Examiner-_____

Sign. Of External Examiner-_____

Sign. of Teacher

Sign. of H.O.D.

Index

Sl.No	PARTICULARS	Page Number
1	**Assessment and understanding the relation between Parthivatwa & subjective objective parametric tests**	
2	**Assessment of objective parametric measures of Guna**	
3	**Assessment of Rasa by based on classical symptoms for each rasa dravyas**	
4	**Comparative organoleptic and macroscopic examination**	
5	**Microscopic Identification of genuine and adulterated drug**	
6	**Demonstration of skills to identify the medicinal plants in the college garden**	
7	**Out Campus Visit**	
8	**Selection of Ekala dravya prayoga in various clinical conditions**	
9	**Physicochemical study of medicinal plant**	
10	**Preliminary phytochemical study medicinal plant**	
11	**TLC technique**	
12	**Demonstration of skills to identify the medicinal plants in the college garden**	
13	**Out Campus Visit**	
14	**Selection of Ekala dravya prayoga in various clinical conditions**	
15	**Different Cultivation technique including methods mentioned in Vrikshayurveda**	
16	**Exercise on Network pharmacology**	

17	**Preparations of digital herbarium**	
18	**Demonstration of skills to identify the medicinal plants in the college garden**	
19	**Out Campus Visit**	
20	**Selection of Ekala dravya prayoga in various clinical conditions**	

Practical no 1. **Date:-**

1.1Name of the Practical – Assessment and Understanding the relation between Parthivatwa & subjective/ objective parametric tests

Principle:-Bulk density is more in Parthiva Dravyas as compared to other Mahabhutas

Dravyas to be used -

Drugs	Asthishrnkhala	Sariva	Vidari	Maricha	Shatavari	Jambu	Godhuma	Ushira
Botanical Name								
Part used								

1.1 a) Name of the Test –Bulk Density

Aim & Objective-

Materials-

Method/Procedure-

Observations / Calculations-

Formula- BD = Wt of sample / Volume gm/cc

Inference:

Conclusion:

Remarks:

Student's signature **Teacher's signature**

1.1.b) Name of the Test Specific gravity (Solid)
Principle – Specific gravity is more in Parthiva Dravyas as compared to other Mahabhutas

Aim & Objective:

Materials:

Method/Procedure:

Observations / Calculations:

S. No.	Observation Number	1	2	3
1	Weight of density bottle (W_1 g)			
2	Weight of density bottle + Dry drug (W_2 g)			
3	Weight of bottle + dry drug + water at temperature T_x^0 C			
4	(W_3 g) Weight of bottle + water (W_4 g) at temperature T_x^0 C			
	Specific gravity G at T_x^0 C			
	Average specific gravity at T_x^0 C			

CALCULATIONS: Specific gravity of solid drug = Density of water at 27 C/Weight of water of equal volume

$= (W_2-W_1)/(W_4-W_1)-(W_3-W_2)$

$= (W_2-W_1)/(W_2-W_1)-(W_3-W_4)$

Conclusion -

Interpretation-

Student's signature Teacher's signature

Results:

Sr. No.	Particular	Asthishrnkhala	Sariva	Vidari	Maricha	Shatavari	Jambu	Godhuma	Ushira
a	Density (Bulk)								
b	Specific Gravity Solid								

Conclusions-

Student's signature

Teacher's signature

Practical no 1 **Date:-**

1.2 Name of the Practical - Assessment and Understanding the relation between Jaliyatwa & subjective/ objective parametric tests

Principle:- Viscosity and Jaliyatwa is inversely proportional

Dravyas to be used -

Drugs	**Kumari**	**Vidari**	**Sariva**	**Shunthi**	**Ikshu**	**Usheera**	**Kamala**	**Apamarga**
Botanical Name								
Part used								

1.2.a) Name of the test – Viscosity

Aim & Objective-

Materials-

Method/Procedure-

Observations -
Time required for standard to falling down E to F– C
Time required for sample to falling down E to F -t

Calculations-Kinematic viscosity =V=1/C*t

Interpretation-

Student's signature Teacher's signature

1.2.b) Name of the Test- Specific gravity (Liquid)

Principle :- As Specific Gravity increases Jaliyatwa decreases

Aim & Objective:

Materials:

Method/Procedure:

Observations / Calculations:

S. No.	Observation Number	Result
1 2 3	Weight of density bottle (W_1 g) Weight of density bottle + water (W_2 g) Weight of bottle + sample at same temperature (W_3 g)	
	W_3-W_1/W_2-W_1	
	Average specific gravity at T_x^0 C	

Conclusion -

Interpretation-

Student's signature **Teacher's signature**

1.2.c) Name of the test -Moisture content

Principle:- As moisture content increases Jaliyatwa increases

Aim & Objective-

Materials-

Method/Procedure-

Observations-

1) Weight of empty evaporating dish–A
2) Weight of evaporating dish with sample –B

3) Weight of evaporating dish with sample after heating –C
4)Weight of evaporating dish with sample after heating –C_1
This process should be repeated till two consecutive weights will be equal

Calculations-

$$\frac{B-C_1}{B-A} \times 100$$

Conclusion-

Student's signature

Teacher's signature

Details:

Sr. No.	Particular	Kumari	Vidari	Sariva	Shunthi	Ikshu	Usheera	Kamala	Apamarga
A	Viscosity								
B	Specific Gravity								
C	Moisture content								

Practical no 1. **Date:-**

1.3 Name of the Practical - Assessment and Understanding the relation between Aagneyatwa & subjective/ objective parametric tests

Principle:- Extreme acidity and alkalinity showing more Aagneyatwa

Dravyas to be used-

Drugs	**Shunthi**	**Shatavari**	**Maricha**	**Dhataki**	**Chitraka**	**Gokhura**	**Hingu**	**Chandana**
Botanical Name								
Part used								

1.3.a) Name of the test -pH
Aim & Objective-

Method/Procedure-

Observation-

Conclusion-

Student's signature Teacher's signature

b) Name of the test -Moisture content

Principle: - Moisture content is less in Aagneya dravyas as compared to other Mahabhutas

Aim & Objective-

Materials-

Method/Procedure-

Observations-

1) Weight of empty evaporating dish –A

2) Weight of evaporating dish with sample –B

3) Weight of evaporating dish with sample after heating –C

4) Weight of evaporating dish with sample after heating –C_1

This process should be repeated till two consecutive weights will be equal

Calculations-

$$\frac{B - C_1}{B - A} \times 100$$

Conclusion-

Student's signature Teacher's signature

Reports-

Sr. No.	Particular	Shunthi	Shatavari	Maricha	Dhataki	Chitraka	Gokhura	Hingu	Chandana
a	pH								
b	Moisture content								

Interpretation –

Student's signature

Teacher's signature

Practical no 1. **Date:-**

1.4 Assessment and Understanding the relation between Vayaviytwa & subjective/ objective parametric tests

Principle:- More the Fat content Less the Vayaviyatwa

Dravyas to be used-

Drugs	**Usheera**	**Ashwagandha**	**Nimba**	**Vidari**	**Khadira**	**Tila**	**Jambu**	**Kapikacchu**
Botanical Name								
Part used								

a) Name of the test -Fat content

Aim & Objective-

Method/Procedure-

Observation-

1. Weight of sample-
2. Weight of the empty Evaporating dish
3. Weight of Evaporating dish + dried extract

Calculations –

Percentage of fat content value= weight of Oil /Total weight of sample taken X 100

Conclusion-

Student's signature Teacher's signature

b) Name of the Test- Specific gravity (Liquid)

Principle: Specific gravity is less when compared with Parthiva Dravya

Aim & Objective-

Materials-

Method/Procedure-

Observations / Calculations-

S. No.	Observation Number	Result
1 2 3	Weight of density bottle (W_1 g) Weight of density bottle + water (W_2 g) Weight of bottle + sample at same temperature (W_3 g)	
	W_3-W_1/W_2-W_1	
	Average specific gravity at T_x^0 C	

Conclusion -

Interpretation-

Student's signature **Teacher's signature**

d) Name of the Test –Bulk Density

Principle:- Bulk density is less when compared with Prathiva dravya

Aim & Objective-

Materials-

Method/Procedure-

Observations / Calculations-

Formula- BD = Wt of sample / Volume gm/cc

Inference:

Conclusion:

Remarks:

Student's signature **Teacher's signature**

Reports-

Sr. No.	Particular	Ushira	Ashwagandha	Nimba	Vidari	Khadira	Tila	Jambu	Kapikacchu
A	Fat Content								
B	Specific Gravity (Liquid)								
C	Density-Bulk								

Interpretation-

Student's signature **Teacher's signature**

Practical no 1. **Date:-**

1.5 Name of the Practical - Assessment and Understanding the relation between Aakashiyatwa & subjective/ objective parametric tests

Bulk Density is less when compared with Vayaviya Dravya.

Dravyas to be used-

Drugs	**Usheera**	**Kumari**	**Apamarga**	**Jeeraka**	**Jatamansi**
Botanical Name					
Part used					

1.5 a**) Name of the Test –Bulk Density**

Aim & Objective-

Materials-

Method/Procedure-

Observations / Calculations-

Formula- BD = Wt of sample / Volume gm/cc

Inference:

Conclusion:

Remarks:

Student's signature **Teacher's signature**

Reports-

Sr. No.	Particular	Usheera	Kumari	Apamarga	Jeeraka	Jatamansi
A	Density Bulk					

Interpretation-

Student's signature **Teacher's signature**

Practical no 2 **Date:-**

Name of the Practical - Assessment of objective parametric measures of Guna

2.1- Assessment of objective parametric measures Guru & Laghu Guna

Principle- Bulk density is directly proportional to physical Guruta & Laghuta

Drugs	Shatavari	Bala	Yava	Dhanyaka
Botanical Name				
Part used				

a) Name of the Test –Bulk Density

Aim & Objective-

Materials-

Method/Procedure-

Observations / Calculations-

Formula- BD = Wt of sample / Volume gm/cc

Inference:

Conclusion:

Remarks:

Student's signature **Teacher's signature**

b) Name of the Test Specific gravity (Solid)

Principle:- Specific Gravity directly proportional to Physical Guruta & Laghuta

Aim & Objective:

Materials:

Method/Procedure:

Observations / Calculations:

S. No.	Observation Number	1	2	3
1 2 3 4	Weight of density bottle (W_1 g) Weight of density bottle + Dry drug (W_2 g) Weight of bottle + dry drug + water at temperature T_x^0 C (W_3 g) Weight of bottle + water (W_4 g) at temperature T_x^0 C			
	Specific gravity G at T_x^0 C			
	Average specific gravity at T_x^0 C			

CALCULATIONS: Specific gravity of solid drug = Density of water at 27 C/Weight of water of equal volume

$= (W_2-W_1)/(W_4-W_1)-(W_3-W_2)$

$= (W_2-W_1)/(W_2-W_1)-(W_3-W_4)$

Conclusion -

Interpretation-

Student's signature Teacher's signature

c) Name of the Test Specific gravity (Liquid)

Aim & Objective:

Materials:

Method/Procedure:

Observations / Calculations:

S. No.	Observation Number	Result
1 2 3	Weight of density bottle (W_1 g) Weight of density bottle + water (W_2 g) Weight of bottle + sample at same temperature (W_3 g)	
	W_3-W_1/W_2-W_1	
	Average specific gravity at T_x^0 C	

Conclusion -

Interpretation-

Student's signature Teacher's signature

Results -

Sr. No.	Particular	Shatavari	Bala	Yava	Dhanyaka
a	Density (Bulk)				
b	Specific Gravity Liquid				
c	Specific Gravity Solid				

Date:-

2.2 -Name of the Practical - Assessment of objective parametric measures of Snigdha and Ruksha guna drugs

Principle:- Fat Content directly proportional to physical Snigdhata & Rukshata

Drugs	Tila	Eranda	Kulattha	vidanga
Botanical Name				
Part used				

a) Name of the test -Fat content
Aim & Objective-

Method/Procedure-

Observation-

1. Weight of sample-
2. Weight of the empty Evaporating dish
3. Weight of Evaporating dish + dried extract

Calculations –

Percentage of fat content value= weight of Oil /Total weight of sample taken X 100

Conclusion-

Student's signature Teacher's signature

b) Name of the test -Moisture content

Principle – Moisture content is directly proportional to Snigdhata & Rukshata

Aim & Objective-

Materials-

Method/Procedure-

Observations-

1) Weight of empty evaporating dish –A

2) Weight of evaporating dish with sample –B

3) Weight of evaporating dish with sample after heating –C

4) Weight of evaporating dish with sample after heating –C_1

This process should be repeated till two consecutive weights will be equal

Calculations-

$$\frac{B - C_1}{B - A} \times 100$$

Conclusion-

Student's signature

Teacher's signature

c) Name of the test –Swelling index

Principle:- Swelling index is directly proportional to Snigdhata and Rukshata

Aim & Objective-

Materials-

Method/Procedure-

Observations-

Calculation

Swelling index percentage = (Vw-Vk)/Vk*100
Vw : Final drug weight after 24hours
Vk: Initial weight in water

Inference:

Conclusion:

Student's signature

Teacher's signature

Results -

Sr. No.	Particular	Tila	Eranda	Kulattha	Vidanga
a	Fat Content				
b	Moisture Content				
c	Swelling Index				

Practical no 3 **Date:-**

Name of the Practical - Assessment of Rasa based on classical symptoms for each rasa dravyas

Drugs	Madhura	Amla	Lavana	Katu	Tikta	Kashaya
Sanskrit Name						
Botanical Name						
Part used						

Aim & Objective-

Materials-

Method/Procedure-

Observations

Standard Protocol for Determination of Rasa (Taste) Involving Human Subjects

Name of the Volunteer: Age: Date:

PART-A

1. What did you feel in the oral cavity after tasting the sample? (tick one or more option)

Sr. no	Question	Uttam (Highest degree) Score - 3	Madhyam (Medium Degree) Score - 2	Avara (Lowest Degree) Score - 1
1	Coating of the oral cavity			
2	Unctuous/Slimy feeling			
3	Softness of the mouth			
4	Cleansing of mouth			
5	Burning sensation in mouth, throat, chest - After sometime			
6	Disperse quickly			
7	Burning sensation in mouth, forehead			
8	Burning sensation in mouth, forehead, whole body –immediate			
9	pricking sensation on tongue			
10	Feeling of temporary loss of taste			
11	Not pleasant to Tongue			
12	Dryness of mouth			
13	Stiffness of the tongue			

2. What did you feel in mind / brain after tasting the sample?

SI No	Question	Uttam (Highest degree) Score - 3	Madhyam (Medium Degree) Score - 2	Avara (Lowest Degree) Score - 1

1.	Sense of satisfaction			
2.	Pleasant feeling			
3.	Developed likingness in food			
4.	Mental Agitation			

3. Which kind of effect you are experiencing?

SI No	Question	Uttam (Highest degree) Score - 3	Madhyam (Medium Degree) Score - 2	Avara (Lowest Degree) Score - 1
1.	Perspiration/ Sweating			
2.	Discharge from Nose			
3.	Lacrimation/ Tears in eyes			
4.	Stiffness of Head			
5.	Choking feeling in throat / chest Region			

4. What reflective effect you observed?

SI No	Question	Uttam (Highest degree) Score - 3	Madhyam (Medium Degree) Score - 2	Avara (Lowest Degree) Score - 1
1.	Increased Salivation			
2.	Tingling sensation in teeth			
3.	Eye and eyebrow constriction			
4.	Feeling of Goosebumps			

5. What is the Predominant taste of drug/ which taste you felt the most after immediate contact?

SlNo	Option	Score 1-6- depending on predominance of taste
1.	Madhura	

2.	Amla	
3.	Lavana	
4.	Katu	
5.	Tikta	
6.	Kashaya	

Teacher's Signature

Student's Signature

Practical no 4. **Date:-**

Name of the Practical - Comparative organoleptic (Color, Smell, Sound, Touch) and macroscopic examination (Size, Shape, Fracture, External markings like lenticels, ridges, nodes, furrows, cracks etc.) of following group of drugs

a. Root drugs

Drugs	Botanical Name	Family	Synonyms
Ashwagandha			
Chitraka			
Manjishtha			
Musta			
Shatavari			
Vatsanabha			
Yashtimadhu			

Aim & Objective-

Materials -

Method/Procedure-

Observations- Schematic Diagram-

Ashwagandha	**Substitute/Adulterant**
Chitraka	**Substitute/Adulterant**
Manjistha	**Substitutes/Adulterants**
Musta	**Substitute/Adulterant**

Shatavari	**Substitute/Adulterant**
Vatsanabha	**Substitute/Adulterant**

Yashtimadhu	Substitute/Adulterant

Report-

Drugs	**Shabda (Fracture)**	**Sparsha (Touch)**	**Roopa (Colour, Size, Shape)**	**Gandha (Odour)**
Ashwagandha				
Substitute/Adulterant				
Chitraka				
Substitute/Adulterant				
Manjishtha				
Substitute/Adulterant				
Musta				
Substitute/Adulterant				
Shatavari				
Substitute/Adulterant				
Vatsanabha				
Substitute/Adulterant				
Yashtimadhu				
Substitute/Adulterant				

Student's Signature

Teacher's Signature

Practical no 4. **Date:-**

Name of the Practical - Comparative organoleptic (Taste, Color, Smell, Sound, Touch) and macroscopic examination (Size, Shape, Fracture, External markings like lenticels, ridges, nodes, furrows, cracks etc.) of following group of drugs

b. Rhizome drugs

Drugs	Botanical Name	Family	Synonyms
Haridra			
Kutuki			
Shunthi			
Vacha			

Aim & Objective-

Materials -

Method/Procedure-

Observations- Schematic Diagram-

Haridra	**Substitute/Adulterant**
Kutuki	**Substitute/Adulterant**
Shunthi	**Substitutes/Adulterants**
Vacha	**Substitute/Adulterant**

Report-

Drugs	**Shabda (Fracture)**	**Sparsha (Touch)**	**Roopa (Colour, Size, Shape)**	**Gandha (Odour)**
Haridra				
Substitute/Adulterant				
Kutuki				
Substitute/Adulterant				
Shunthi				
Substitute/Adulterant				
Vacha				
Substitute/Adulterant				

Student's Signature

Teacher's Signature

Practical no 4. **Date:-**

Name of the Practical - Comparative organoleptic (Taste, Color, Smell, Sound, Touch) and macroscopic examination (Size, Shape, Fracture, External markings like lenticels, ridges, nodes, furrows, cracks etc.) of following group of drugs

c. Stem drugs

Drugs	Botanical Name	Family	Synonyms
Asthishunkhala			
Guduchi			

Aim & Objective-

Materials -

Method/Procedure-

Observations- Schematic Diagram-

Asthishrunkhala	**Substitute/Adulterant**
Guduchi	**Substitute/Adulterant**

Drugs	Shabda (Fracture)	Sparsha (Touch)	Roopa (Colour, Size, Shape)	Rasa (Taste)	Gandha (Odour)
Asthishrukhala					
Substitute/Adulterant					
Guduchi					
Substitute/Adulterant					

Student's Signature

Teacher's Signature

Practical no 4. **Date:-**

Name of the Practical - Comparative organoleptic (Taste, Color, Smell, Sound, Touch) and macroscopic examination (Size, Shape, Fracture, External markings like lenticels, ridges, nodes, furrows, cracks etc.) of following group of drugs

d. Bark drugs

Drugs	Botanical Name	Family	Synonyms
Arjuna			
Ashoka			
Kutaja			
Nimba			
Twaka			

Aim & Objective-

Materials -

Method/Procedure-

Observations- Schematic Diagram-

Arjuna	**Substitute/Adulterant**
Ashoka	**Substitute/Adulterant**
Kutaja	**Substitutes/Adulterants**
Nimba	**Substitute/Adulterant**

Twaka	**Substitute/Adulterant**

Report-

Drugs	**Shabda (Fracture)**	**Sparsha (Touch)**	**Roopa (Colour, Size, Shape)**	**Rasa (Taste)**	**Gandha (Odour)**
Arjuna					
Substitute/Adulterant					
Ashoka					
Substitute/Adulterant					
Kutaja					
Substitute/Adulterant					
Nimba					
Substitute/Adulterant					
Twaka					
Substitute/Adulterant					

Student's Signature

Teacher's Signature

Practical no 4. **Date:-**

Name of the Practical - Comparative organoleptic (Taste, Color, Smell, Sound, Touch) and macroscopic examination (Size, Shape, Fracture, External markings like lenticels, ridges, nodes, furrows, cracks etc.) of following group of drugs

e. Heart wood drugs

Drugs	Botanical Name	Family	Synonyms
Beejaka			
Chandana			
Khadira			

Aim & Objective-

Materials -

Method/Procedure-

Observations- Schematic Diagram-

Beejaka	**Substitute/Adulterant**
Chandana	**Substitute/Adulterant**
Khadira	**Substitute/Adulterant**

Drugs	Shabda (Fracture)	Sparsha (Touch)	Roopa (Colour, Size, Shape)	Rasa (Taste)	Gandha (Odour)
Beejaka					
Substitute/Adulterant					
Chandana					
Substitute/Adulterant					
Khadira					
Substitute/Adulterant					

Student's Signature **Teacher's Signature**

Practical no 4. **Date:-**

Name of the Practical - Comparative organoleptic (Taste, Color, Smell, Sound, Touch) and macroscopic examination (Size, Shape, Fracture, External markings like lenticels, ridges, nodes, furrows, cracks etc.) of following group of drugs

f. Leaf drugs

Drugs	Botanical Name	Family	Synonyms
Kumari			
Meshshrungi			
Vasa			

Aim & Objective-

Materials -

Method/Procedure-

Observations- Schematic Diagram-

Kumari	**Substitute/Adulterant**
Meshshrungi	**Substitute/Adulterant**
Vasa	**Substitute/Adulterant**

Drugs	Shabda (Fracture)	Sparsha (Touch)	Roopa (Colour, Size, Shape)	Rasa (Taste)	Gandha (Odour)
Kumari					
Substitute/Adulterant					
Meshashrungi					
Substitute/Adulterant					
Vasa					
Substitute/Adulterant					

Student's Signature **Teacher's Signature**

Practical no 4. **Date:-**

Name of the Practical - Comparative organoleptic (Taste, Color, Smell, Sound, Touch) and macroscopic examination (Size, Shape, Fracture, External markings like lenticels, ridges, nodes, furrows, cracks etc.) of following group of drugs

g. Flower drugs

Drugs	Botanical Name	Family	Synonyms
Dhataki			
Kunkuma			
Lavanga			

Aim & Objective-

Materials -

Method/Procedure-

Observations- Schematic Diagram-

Dhataki	**Substitute/Adulterant**
Kunkuma	**Substitute/Adulterant**
Lavanga	**Substitute/Adulterant**

Drugs	Shabda (Fracture)	Sparsha (Touch)	Roopa (Colour, Size, Shape)	Rasa (Taste)	Gandha (Odour)
Dhataki					
Substitute/Adulterant					
Kunkuma					
Substitute/Adulterant					
Lavanga					
Substitute/Adulterant					

Student's Signature **Teacher's Signature**

Practical no 4. **Date:-**

Name of the Practical - Comparative organoleptic (Taste, Color, Smell, Sound, Touch) and macroscopic examination (Size, Shape, Fracture, External markings like lenticels, ridges, nodes, furrows, cracks etc.) of following group of drugs

h. Fruit drugs

Drugs	Botanical Name	Family	Synonyms
Aamalaki			
Aaragwadha			
Bhallataka			
Bibhitaki			
Gokshura			
Haritaki			
Madanphala			
Maricha			
Pippali			
Vidanga			

Aim & Objective-

Materials -

Method/Procedure-

Observations- Schematic Diagram-

Aamalaki	**Substitute/Adulterant**
Aaragwadha	**Substitute/Adulterant**
Bhallataka	**Substitutes/Adulterants**

Bibhitaki	**Substitute/Adulterant**
Gokshura	**Substitute/Adulterant**
Haritaki	**Substitute/Adulterant**

Madanphala	Substitute/Adulterant
Maricha	**Substitute/Adulterant**
Pippali	**Substitute/Adulterant**

Vidanga	Substitute/Adulterant

Report-

Drugs	Shabda (Fracture)	Sparsha (Touch)	Roopa (Colour, Size, Shape)	Rasa (Taste)	Gandha (Odour)
Aamalaki					
Substitute/Adulterant					
Aaragwadha					
Substitute/Adulterant					
Bhallataka					
Substitute/Adulterant					
Bibhitaki					
Substitute/Adulterant					
Gokhura					
Substitute/Adulterant					
Haritaki					
Substitute/Adulterant					
Madanphala					
Substitute/Adulterant					
Maricha					
Substitute/Adulterant					
Pippali					

Substitute/Adulterant					
Vidanga					
Substitute/Adulterant					

Student's Signature

Teacher's Signature

Practical no 4. **Date:-**

Name of the Practical - Comparative organoleptic (Taste, Color, Smell, Sound, Touch) and macroscopic examination (Size, Shape, Fracture, External markings like lenticels, ridges, nodes, furrows, cracks etc.) of following group of drugs

i. Phalaraja drug

Drugs	Botanical Name	Family	Synonyms
Kampillaka			

Aim & Objective-

Materials -

Method/Procedure-

Observations- Schematic Diagram-

Kampillaka	Substitute/Adulterant

Reports-

Drugs	Shabda (Fracture)	Sparsha (Touch)	Roopa (Colour, Size, Shape)	Rasa (Taste)	Gandha (Odour)
Kampillaka					
Substitute/Adulterant					

Student's Signature Teacher's Signature

Practical no 4. **Date:-**

Name of the Practical - Comparative organoleptic (Taste, Color, Smell, Sound, Touch) and macroscopic examination (Size, Shape, Fracture, External markings like lenticels, ridges, nodes, furrows, cracks etc.) of following group of drugs

j. Seed drugs

Drugs	Botanical Name	Family	Synonyms
Bakuchi			
Ela			
Eranda			
Jyotishmati			
Kapikacchu			

Aim & Objective-

Materials -

Method/Procedure-

Observations- Schematic Diagram-

Bakuchi	Substitute/Adulterant
Ela	**Substitutes/Adulterants**
Eranda	**Substitute/Adulterant**

Jyotishmati	Substitute/Adulterant
Kapikacchu	**Substitute/Adulterant**

Report-

Drugs	Shabda (Fracture)	Sparsha (Touch)	Roopa (Colour, Size, Shape)	Rasa (Taste)	Gandha (Odour)
Bakuchi					
Substitute/Adulterant					
Dhattura					
Substitute/Adulterant					
Ela					
Substitute/Adulterant					
Eranda					
Substitute/Adulterant					
Jyotishmati					
Substitute/Adulterant					
Kapikacchu					
Substitute/Adulterant					

Student's Signature

Teacher's Signature

Practical no 4. **Date:-**

Name of the Practical - Comparative organoleptic (Taste, Color, Smell, Sound, Touch) and macroscopic examination (Size, Shape, Fracture, External markings like lenticels, ridges, nodes, furrows, cracks etc.) of following group of drugs

k. Unorganized drugs

Drugs	Botanical Name	Family	Synonyms
Guggulu			
Hingu			
Mocharasa			

Aim & Objective-

Materials -

Method/Procedure-

Observations- Schematic Diagram-

Guggulu	**Substitute/Adulterant**
Hingu	**Substitute/Adulterant**
Mocharasa	**Substitute/Adulterant**

Drugs	Shabda (Fracture)	Sparsha (Touch)	Roopa (Colour, Size, Shape)	Rasa (Taste)	Gandha (Odour)
Guggulu					
Substitute/Adulterant					
Hingu					
Substitute/Adulterant					
Mocharasa					
Substitute/Adulterant					

Student's Signature **Teacher's Signature**

Practical no 4. **Date:-**

Name of the Practical - Comparative organoleptic (Taste, Color, Smell, Sound, Touch) and macroscopic examination (Size, Shape, Fracture, External markings like lenticels, ridges, nodes, furrows, cracks etc.) of following group of drugs

l. Whole plant drugs

Drugs	Botanical Name	Family	Synonyms
Apamarga			
Bhrungaraja			
Bhumyamalaki			
Brahmi			
Kalamegha			
Mandukaparni			

Aim & Objective-

Materials -

Method/Procedure-

Observations- Schematic Diagram-

Apamarga	**Substitute/Adulterant**
Bhrungaraja	**Substitutes/Adulterants**
Bhumyamalaki	**Substitute/Adulterant**

Brahmi	Substitute/Adulterant
Kalamegha	**Substitute/Adulterant**
Mandukaparni	**Substitute/Adulterant**

Report-

Drugs	Shabda (Fracture)	Sparsha (Touch)	Roopa (Colour, Size, Shape)	Rasa (Taste)	Gandha (Odour)
Apamarga					
Substitute/Adulterant					
Bhrungaraja					
Substitute/Adulterant					
Bhumyamalaki					
Substitute/Adulterant					
Brahmi					
Substitute/Adulterant					
Kalamegha					
Substitute/Adulterant					
Mandukaparni					
Substitute/Adulterant					

Student's Signature

Teacher's Signature

Practical no 4. **Date:-**

Name of the Practical - Comparative organoleptic (Taste, Color, Smell, Sound, Touch) and macroscopic examination (Size, Shape, Fracture, External markings like lenticels, ridges, nodes, furrows, cracks etc.) of following group of drugs

m. Gall drug

Drugs	Botanical Name	Family	Synonyms
Karkatashrungi			

Aim & Objective-

Materials -

Method/Procedure-

Observations- Schematic Diagram-

Karkatshrungi	Substitute/Adulterant

Reports-

Drugs	Shabda (Fracture)	Sparsha (Touch)	Roopa (Colour, Size, Shape)	Rasa (Taste)	Gandha (Odour)
Karkatashrungi					
Substitute/Adulterant					

Student's Signature Teacher's Signature

Practical no 5. **Date:-**

Name of the Practical - Microscopic Identification of genuine and adulterated drug, minimum 2 samples from Root/stem/leaf /bark/fruits

Botanical Name-

Family Name-

Part used

Aim & Objective-

Materials -

Method/Procedure-

Observations-

Schematic Diagram (T.S.)	Substitute/Adulterant
Microscopic diagram of T. S.	**Substitute/Adulterant**

Description

Schematic Diagram (T.S.)	Substitute/Adulterant
Microscopic diagram of T. S.	**Substitute/Adulterant**

Student's Signature

Teacher's Signature

Practical No. 6

College Garden Visit (In Campus)

Visit No. : **Date:**

Sl No	Classical Name / common Name	Botanical Name	Family	Key Points/Synonyms
1				
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Student's signature **Teacher's signature**

7. Out Campus Visit

Visit No. : **Date:**

Place / Facility Visited: Cultivated garden / Tissue Culture Lab / Herbaria / Pharmacognosy Lab / Quality Control Lab / In-situ and Forest Plants demonstration (Tick appropriate)

Observations :

Out Come:

Student signature **Staff Signature**

Practical No. 8 **Date-**

Masked case sheet no. -

Ekal Dravya Parikshan (Proforma for Single drug therapy) -

A. Vikar Parikshan (Analysis of Disease) -

- Vikar Prakruti – (Nature of Disease)
- Dosha with Anshansha Kalpana (Fractionalization of Dosha)
- Dushya – Dhatu-Upadhatu- Mala -

Adhishthana -

- Dosha Sthana – Swasthanstha/ Anyasthanagata
- Vyadhi Sthana– Avirbhava Sthana
- Vyadhimarga –Koshtha/Shakha/ Madhyama

Hetuvishesha -

- Dosha Hetu -
- Vyadhi Hetu-
- Dushya Vaigunyakara Hetu -
- Matratha Hetu- Mrudu/Madhyam/Atimatra

Vyadhi Bala (Hetvadikatsnyarvayvaihi) (हेत्वादिकात्स्न्यार्वयवैः) -

- Hina/Madhyam/Ati-

Vyadhikala (Naktandinrtubhuktanshaihi- Yathamala) - (नक्तंदिनर्तुभुक्तांशैः – यथामल)

Vyadhi/ Lakshana (Vaya- Kalavadhi)-

Vyadhi/ Doshavastha-

- Sama/Nirama
- Vega/ Avega
- Upastambhita/ Nirupstambhita
- Sopdrava/ Nirupdrava
- Purana/ Nava
- Bahudosha/ Alpadosha

B) Rugna Pariksha -

- Rugnabala -
- Rugnavaya -
- Rugna Avastha- Santarpanarha/ Apatarpanarha -

C) Aushadha Pariksha -

- Dosha (with Amshaunsha kalpana)-
- Dushya (Dhatu/Upadhatu/Mala)-
- Bala(Hina/Madyama/Ati)-
- Kala(Nityag-Greeshmadi)-
- Anala -

- Prakruti-
- Vaya-
- Satwa (Hina-Avara/Madhya/Pravara)-
- Satmya (Avara/ Madhya/Pravara)-
- Aahara-
- Avastha (Sama/ Nirama) -

D) Upakramanishchiti –

- Shodhan/ Shaman-
- Santarpana/ Apatarpana-
- Langhna/Bruhana/Snehana/ Rukshana/Swedana/Stambhana-

E) Doshavyadhi- Anusara- Avasyaka-Gunasamuchaya

- Prabhav -
- Rasa -
- Vipaka -
- Virya-
- Guna -

Observations –

Point no.	Details	Observed	Plants can be recommended
1	Dosha (with Amshaunsha kalpana)		
2	Dushya (Dhatu/Upadhatu/Mala)		
3	Bala(Hina/Madyama/Ati) (Rugna/Vyadhi)		
4	Kala(Nityag-Greeshmadi) (Rugna/Vyadhi)		
5	Anala (Agni-digestive fire)		
6	Prakruti (Rugna/Vyadhi)		
7	Vaya (Rugna/Vyadhi)		
8	Satwa (Hina-Avara/Madhya/Pravara)		
9	Satmya (Avara/ Madhya/Pravara)		
10	Aahara		
11	Avastha • Sama/ Nirama • Vega/ Avega • Upastambhita/ Nirupstambhita • Sopdrava/ Nirupdrava • Purana/ Nava • Bahudosha/ Alpadosha		

F) Nishchita Dravya -

G) Kalpana -

H) Matra -

I) Kala (Annanadi Bheshaja Kala)-

- Duration

J) Anupana -

K) Pathya/ Apathya -

Student's Signature

Teacher's Signature

Practical no 9 **Date:-**

Name of the Practical - Physicochemical study of medicinal plant

Drugs		
Botanical Name		
Part used		

a) Name of the test –Foreign Matter

Aim & Objective-

Materials-

Method/Procedure-

Observations / Calculations-
1. Weight of the given sample- A
2. Weight of the foreign matter sorted - B

Formula- percentage of foreign matter =B*100/ A

Inference:

Conclusion:

Remarks:

Student's signature **Teacher's signature**

b) Name of the test -Moisture content

Aim & Objective-

Materials-

Method/Procedure-

Observations-

1) Weight of empty evaporating dish –A

2) Weight of evaporating dish with sample –B

3) Weight of evaporating dish with sample after heating –C

4) Weight of evaporating dish with sample after heating –C_1

This process should be repeated till two consecutive weights will be equal

Calculations-

$$\frac{B - C_1}{B - A} \times 100$$

Conclusion-

Student's signature

Teacher's signature

c) Name of the test -Ash content

Aim & Objective-

Materials-

Method/Procedure-

Observations-

1) Weight of empty Silica Crucible –A

2) Weight of Silica Crucible with sample –B

3) Weight of Silica Crucible with sample after incineration –C

Calculations-

$$\frac{C - A}{B - A} \times 100$$

Conclusion-

Inference-

Student's signature

Teacher's signature

d) Name of the test –Extractive Value

Aim & Objective-

Materials-

Method/Procedure-

Observations-

1) Weight of sample taken for extract –A

2) Weight of evaporating dish –B

3) Weight of evaporating dish with sample after heating –C

4) Weight of dry extract obtained -C-B=D

This process should be repeated till two consecutive weights will be equal

Calculations-

Percentage of Extractive value-=D*100/A

Conclusion-

Student's signature

Teacher's signature

Results -

Sr. No.	Particular		
a	Foreign Matter		
b	Moisture Content		
c	Ash value		
d	Extractive value		

Practical no 10 **Date:-**

Name of the Practical - Preliminary phytochemical study medicinal plant

Drugs		
Botanical Name		
Part used		

Aim & Objective-

Materials-

Method/Procedure-

Observations and results -

Sl. No	Tests	Criteria	RESULT YES/NO
I.	**Test for alkaloids**		
	Dragendorff's Test	Orange brown precipitate	
	Wagner's test	Reddish brown precipitate	
	Hager's Test	Yellow precipitate	
	Mayer's Test	Cream precipitate	
II.	**Test for Carbohydrates and Glycosides**		
	Molish's test	Purple to violet color ring	
	Fehlings solution Test	Brick red precipitate	
	Benedict's solution test	Reddish brown ppt	
	Barford's solution test	Red ppt	
III	**Tests for Proteins and Aminoacids**		
	Millon's Test	White precipitate turns red on heating	
	Ninhydrin solution Test	Violet colour	
IV	**Tests for Phenolic compounds and Tannins**		
	Ferric chloride solution	Blue green color	
	Sodium hydroxide	Yellow to red ppt	

V	**Test for Phytosterols and Triterpenoids**		
	Liebermann's Buchard's Test	Deep red color	
	Salkowski reaction	Red color	
VI	**Test for flavonoids**		
	Shindoda test	Pink color	
VII.	**Test for Saponin**		
	Foam test	1 cm foam layer	

Student's signature **Teacher's signature**

Practical No. 11 **Date-**

Name of the practical -Thin Layer Chromatography

Aim-

Materials -

Procedure-

Observations and results -

Type of extracts –

Solvent system used

Solvent front-

Sr. No.	Spot distance	Rf values	Sketch	Visual light	254nm	365nm	Iodine chamber

Conclusion –

Interpretation-

Teacher's Signature

Student's Signature

Practical No. 12

College Garden Visit (In Campus)

Visit No. : **Date:**

Sl No	Classical Name / common Name	Botanical Name	Family	Key Points/Synonyms
1				
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Student's signature **Teacher's signature**

13. Out Campus Visit

Visit No. : **Date:**

Place / Facility Visited: Cultivated garden / Tissue Culture Lab / Herbaria / Pharmacognosy Lab / Quality Control Lab / In-situ and Forest Plants demonstration (Tick appropriate)

Observations :

Out Come:

Student signature **Staff Signature**

Practical No. 14 **Date-**

Masked case sheet no. -

Ekal Dravya Parikshan (Proforma for Single drug therapy) -

A. Vikar Parikshan (Analysis of Disease) -

- Vikar Prakruti – (Nature of Disease)
- Dosha with Anshansha Kalpana (Fractionalization of Dosha)
- Dushya – Dhatu-Upadhatu- Mala -

Adhishthana -

- Dosha Sthana – Swasthanstha/ Anyasthanagata
- Vyadhi Sthana– Avirbhava Sthana
- Vyadhimarga –Koshtha/Shakha/ Madhyama

Hetuvishesha -

- Dosha Hetu -
- Vyadhi Hetu-
- Dushya Vaigunyakara Hetu -
- Matratha Hetu- Mrudu/Madhyam/Atimatra

Vyadhi Bala (Hetvadikatsnyarvayvaihi) (हेत्वादिकात्स्न्यार्वयवैः) -

- Hina/Madhyam/Ati-

Vyadhikala (Naktandinrtubhuktanshaihi- Yathamala) - (नक्तंदिनर्तुभुक्तांशैः – यथामल)

Vyadhi/ Lakshana (Vaya- Kalavadhi)-

Vyadhi/ Doshavastha-

- Sama/Nirama
- Vega/ Avega
- Upastambhita/ Nirupstambhita
- Sopdrava/ Nirupdrava
- Purana/ Nava
- Bahudosha/ Alpadosha

B) Rugna Pariksha -

- Rugnabala -
- Rugnavaya -
- Rugna Avastha- Santarpanarha/ Apatarpanarha -

C) Aushadha Pariksha -

- Dosha (with Amshaunsha kalpana)-
- Dushya (Dhatu/Upadhatu/Mala)-
- Bala(Hina/Madyama/Ati)-
- Kala(Nityag-Greeshmadi)-
- Anala -

- Prakruti-
- Vaya-
- Satwa (Hina-Avara/Madhya/Pravara)-
- Satmya (Avara/ Madhya/Pravara)-
- Aahara-
- Avastha (Sama/ Nirama) -

D) Upakramanishchiti –

- Shodhan/ Shaman-
- Santarpana/ Apatarpana-
- Langhna/Bruhana/Snehana/ Rukshana/Swedana/Stambhana-

E) Doshavyadhi- Anusara- Avasyaka-Gunasamuchaya

- Prabhav -
- Rasa -
- Vipaka -
- Virya-
- Guna -

Observations –

Point no.	Details	Observed	Plants can be recommended
1	Dosha (with Amshaunsha kalpana)		
2	Dushya (Dhatu/Upadhatu/Mala)		
3	Bala(Hina/Madyama/Ati) (Rugna/Vyadhi)		
4	Kala(Nityag-Greeshmadi) (Rugna/Vyadhi)		
5	Anala (Agni-digestive fire)		
6	Prakruti (Rugna/Vyadhi)		
7	Vaya (Rugna/Vyadhi)		
8	Satwa (Hina-Avara/Madhya/Pravara)		
9	Satmya (Avara/ Madhya/Pravara)		
10	Aahara		
11	Avastha • Sama/ Nirama • Vega/ Avega • Upastambhita/ Nirupstambhita • Sopdrava/ Nirupdrava • Purana/ Nava • Bahudosha/ Alpadosha		

F) Nishchita Dravya -

G) Kalpana -

H) Matra -

I) Kala (Annanadi Bheshaja Kala)-

- Duration

J) Anupana -

K) Pathya/ Apathya -

Student's Signature

Teacher's Signature

Practical No- 15 **Date of demonstration –**

Name of the Practical – Different Cultivation technique including methods mentioned in Vrikshayurveda

Aim:
Dravya (Name of the plant)

Botanical Name- **Family -**
Method mentioned in Vrikshayurveda:

AGROTECHNIQUES

Propagation materials-

Climate and Soil-

Planting in the field

- **Land preparation and fertilizer application-**
- **Transplanting and optimum spacing-**
- **Intercropping system-**
- **Intercultural and maintenance practices-**
- **Irrigation practices-**
- **Disease and pest control**

Observations-

Date	Observed features	Measurement	Remarks

Harvesting time & techniques

Teacher's Signature **Student's Signature**

Practical no. 16 **Date-**

Name of the practical -Network pharmacology activity

Name of drug-
Botanical name-
Phytochemical-

Materials

Process:
1st step: Screening and identification active constituents by Pubmed, IMPPAT or PubChem in digital library

2nd step: Conduct Target identification by BindingDB

3rd step: Conduct Identification of disease gene by DisGeNET

4th step: Conduct GO (Gene ontology) enhancement analysis by KEGG Pathway, R ratio

5th step: Conduct Network construction by STRING, PPI network, cytoscope

Results: Paste network print

Inference:

Conclusion:

Remarks:

Student's signature

Teacher's Signature

17. Herbarium Format	Name of the college DEPARTMENT OF DRAVYAGUNA VIJNYANA		
No: Date: Locality: District: State: Name of the plant: Botanical Name: Family:			
	Tree:		
	Phyllotaxy:		
	Inflorescence:		
	Fruits:		
	Bark:		
	Root:		
Pradhan Rasa: AnuRasa:	Guna:	Virya:	Vipaka:
Karma			
Indication			
Dose			
Formulations			

Teacher's Signature

Student's Signature

Practical No. 18

College Garden Visit (In Campus)

Visit No. : **Date:**

Sl No	Classical Name / common Name	Botanical Name	Family	Key Points/Synonyms
1				
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Student's signature **Teacher's signature**

19. Out Campus Visit

Visit No. : **Date:**

Place / Facility Visited: Cultivated garden / Tissue Culture Lab / Herbaria / Pharmacognosy Lab / Quality Control Lab / In-situ and Forest Plants demonstration (Tick appropriate)

Observations :

Out Come:

Student signature **Staff Signature**

Practical No. 20 **Date-**

Masked case sheet no. -

Ekal Dravya Parikshan (Proforma for Single drug therapy) -

A. Vikar Parikshan (Analysis of Disease) -

- Vikar Prakruti – (Nature of Disease)
- Dosha with Anshansha Kalpana (Fractionalization of Dosha)
- Dushya – Dhatu-Upadhatu- Mala -

Adhishthana -

- Dosha Sthana – Swasthanstha/ Anyasthanagata
- Vyadhi Sthana– Avirbhava Sthana
- Vyadhimarga –Koshtha/Shakha/ Madhyama

Hetuvishesha -

- Dosha Hetu -
- Vyadhi Hetu-
- Dushya Vaigunyakara Hetu -
- Matratha Hetu- Mrudu/Madhyam/Atimatra

Vyadhi Bala (Hetvadikatsnyarvayvaihi) (हेत्वादिकात्स्न्यार्वयवैः) -

- Hina/Madhyam/Ati-

Vyadhikala (Naktandinrtubhuktanshaihi- Yathamala) - (नक्तंदिनर्तुभुक्तांशैः – यथामल)

Vyadhi/ Lakshana (Vaya- Kalavadhi)-

Vyadhi/ Doshavastha-

- Sama/Nirama
- Vega/ Avega
- Upastambhita/ Nirupstambhita
- Sopdrava/ Nirupdrava
- Purana/ Nava
- Bahudosha/ Alpadosha

B) Rugna Pariksha -

- Rugnabala -
- Rugnavaya -
- Rugna Avastha- Santarpanarha/ Apatarpanarha -

C) Aushadha Pariksha -

- Dosha (with Amshaunsha kalpana)-
- Dushya (Dhatu/Upadhatu/Mala)-

- Bala(Hina/Madyama/Ati)-
- Kala(Nityag-Greeshmadi)-
- Anala -
- Prakruti-
- Vaya-
- Satwa (Hina-Avara/Madhya/Pravara)-
- Satmya (Avara/ Madhya/Pravara)-
- Aahara-
- Avastha (Sama/ Nirama) -

D) Upakramanishchiti –

- Shodhan/ Shaman-
- Santarpana/ Apatarpana-
- Langhna/Bruhana/Snehana/ Rukshana/Swedana/Stambhana-

E) Doshavyadhi- Anusara- Avasyaka-Gunasamuchaya

- Prabhav -
- Rasa -
- Vipaka -
- Virya-
- Guna -

Observations –

Point no.	Details	Observed	Plants can be recommended
1	Dosha (with Amshaunsha kalpana)		
2	Dushya (Dhatu/Upadhatu/Mala)		
3	Bala(Hina/Madyama/Ati) (Rugna/Vyadhi)		
4	Kala(Nityag-Greeshmadi) (Rugna/Vyadhi)		
5	Anala (Agni-digestive fire)		
6	Prakruti (Rugna/Vyadhi)		
7	Vaya (Rugna/Vyadhi)		
8	Satwa (Hina-Avara/Madhya/Pravara)		
9	Satmya (Avara/ Madhya/Pravara)		
10	Aahara		
11	Avastha • Sama/ Nirama • Vega/ Avega • Upastambhita/ Nirupstambhita • Sopdrava/ Nirupdrava • Purana/ Nava • Bahudosha/ Alpadosha		

F) Nishchita Dravya -

G) Kalpana -

H) Matra -

I) Kala (Annanadi Bheshaja Kala)-

- Duration

J) Anupana -

K) Pathya/ Apathya -

Student's Signature

Teacher's Signature

Course curriculum for Second Professional BAMS

(PRESCRIBED BY NCISM)



Rasashastra evam Bhaishajyakalpana

(SUBJECT CODE : AyUG-RB)

(Applicable from 2021-22 batch, from the academic year 2023-24 onwards for 5 years or until further notification by NCISM, whichever is earlier)

ncism

।। आयुषे सर्वलोकानाम् ।।

BOARD OF AYURVEDA
NATIONAL COMMISSION FOR INDIAN SYSTEM OF MEDICINE
NEW DELHI-110058

NCISM

II Professional Ayurvedacharya (BAMS)

Subject Code : AyUG-RB

Summary

Total number of Teaching hours: 450			
Lecture hours(LH)-Theory		150	150(LH)
Paper I	75		
Paper II	75		
Non Lecture hours(NLH)-Theory		300	300(NLH)
Paper I & II	90		
Non Lecture hours(NLH)-Practical			
Paper I & II	210		

Examination (Papers & Mark Distribution)					
Item	**Theory Component Marks**	**Practical Component Marks**			
		Practical	**Viva**	**Elective**	**IA**
Paper I	100	100	70	-	30
Paper II	100				
Sub-Total	200	200			
Total marks	400				

Important Note:-The User Manual II BAMS is a valuable resource that provides comprehensive details about the curriculum file. It will help you understand and implement the curriculum. Please read the User Manual II before reading this curriculum file. The curriculum file has been thoroughly reviewed and verified for accuracy. However, if you find any discrepancies, please note that the contents related to the MSE should be considered authentic.
In case of difficulty and questions regarding curriculum write to cur.imp@ncismindia.org

PREFACE

Ayurvedic physician, Pranabhisara Vaidya, makes efforts for his task of management of diseases and maintenance of health. For this role his tool is Potent medicine and tactful techniques acquired from profound knowledge of classics.

Bheshaja is important in chikitsa chatushpada. Prepared personally or purchased or prescribed, the medicines must be potent. Identity, Purity, Quality, Stability, Safety and Efficacy all factors must be assessed carefully so that extensive therapeutic utility without any adverse drug reaction can be achieved. Education of Ayurvedic Pharmaceutics i. e. Ayurvediya Aushadhi Nirmana Shastra must provide foundation through guidance for academicians, Researchers, entrepreneurs and clinicians. Yogavijyana and prayogavijnyana is that expected foundation. Ayurvedic classics expect yuktijna, siddhahasta, sarva bhaishajya kovid (carak su. 20/22) physician as an outcome of studying Ayurveda.

To achieve the programme outcome of the Professional BAMS course of NCISM , this particular subject contributes a lot by providing thorough multidimensional knowledge in cognitive domain, hands on training of pharmaceutical processing in Psychomotor domain and ethical attitudes towards drug development in affective domain.

. The thought process by which Rasa Bheshaja Yogas reaches yojana- administration is very much important. Dose, Duration, Time and Route of administration, anupana all such factors are unique features of holistic Ayurvedic Practice. Acquiring details of these topics along with practical application with understanding its significance is the course objective of the subject RS& BK. The main Goal is to cater professional Competency in Ayurvedic Pharmaceutics and make them capable to select proper / effective yoga and administer it safely.

It is the need of time to make some addition in the current teaching and learning process of Rasashastra & Bhaishajya Kalpana to make it more relevant, practical and contemporary. New teaching technology tools will certainly be helpful in the effective delivery of knowledge of Rasashastra & Bhaishajya Kalpana. As per the revised regulation, the nomenclature of the subject is Ayurvediya Aushadhi Nirmana Vigyana as paper I and Ayurvediya Aushadhi Prayoga Vigyana as paper II for Second Professional BAMS course.

In this revision, NCISM has tried its best to take Rasashastra & Bhaishajya Kalpana teaching beyond the four walls of the classroom and get it connected with present global needs. For effective content delivery create interest in the subject it becomes evident to teach Rasashastra & Bhaishajya Kalpana with practical demonstrations. In order to facilitate proficiency in pharmaceutical preparation and its application in clinical practice, more non-lecture classes are allotted . Teaching methodology guidelines are provided which shall be followed while teaching, to make baseline uniformity in the process of learning.Activity-based learning will enable the internalization of the concepts and will build a strong platform while learning other subjects of Ayurved.

INDEX

Course Code and Name of Course 5
Table 1- Course learning outcomes and matched PO 5
Table 2 : Contents of Course 6
Paper 1 6
Paper 2 13
Table 3: Learning objectives (Theory) of Course 21
Paper 1 21
Paper 2 38
List of Practicals 48
Table 4: Learning objectives (Practical) 49
Practical 1 49
Table 4a: List of Practical 60
Activity 68
Table 5- Teaching learning method 97
Table 6: Assessment Summary: Assessment is subdivided in A to H points 98
6 A-Number of Papers and Marks Distribution 98
6 B - Scheme of Assessment (formative and Summative) 98
6 C - Calculation Method for Internal assessment Marks 99
6 D - Evaluation Methods for Periodical Assessment 99
6 E Question Paper Pattern 100
6 F Distribution of theory examination 101
Paper 1 101
Paper 2 102
6 G Blue print of paper I & II 103
6 H Distribution of Practical Exam 106
References Books/ Resources 111
Abbreviations 114

Course Code and Name of Course

Course code	Name of Course
AyUG-RB	Rasashastra evam Bhaishajyakalpana

Table 1- Course learning outcomes and matched PO

SR1 CO No	A1 Course learning Outcomes (CO) AyUG-RB At the end of the course AyUG-RB, the students should be able to-	B1 Course learning Outcomes matched with program learning outcomes.
CO1	Demonstrate application of principles of Ayurvediya Aushadhi Nirmana (Ayurvedic Pharmaceutics)	PO1,PO5,PO7
CO2	Demonstrate application of principles of Ayurvediya Aushadhi Prayoga Vigyana (Clinical Pharmacology)	PO1,PO5,PO7
CO3	Prepare Ayurvedic formulations in adherence to quality control parameters for raw materials, in-process and finished products	PO1,PO3,PO4,PO5, PO6,PO7,PO8
CO4	Justify rationality of selection and administration of Ayurvedic formulations	PO3,PO5,PO6,PO7, PO8,PO9
CO5	Demonstrate application of ethical, legal and regulatory aspects of manufacturing and sale of Ayurvedic formulations.	PO2,PO8,PO9
CO6	Appraise research in current and emerging trend in Ayurvedic pharmaceuticals and allied sciences.	PO7,PO9

Table 2 : Contents of Course

Paper 1 Ayurvediya Aushadhi Nirmana Vigyana					
Sr. No	**A2 List of Topics**	**B2 Term**	**C2 Marks**	**D2 Lecture hours**	**E2 Non-Lecture hours**
1	**1.Chronological development of Ayurvediya Aushadhi Nirmana** Definition, chronological development, significance and scope of Rasashastra and Bhaishajya Kalpana. Concept of Rasashala , Rasa-mandapa and Bheshajagara Concept of Rasa-Rasayana Briefing on Indians are first to prepare metal based medicines and Recent development in Ayurvedic Pharmaceuticals.	1	05	2	1
2	**2.Paribhasha (Terminology)** 1. Definition and Importance of Paribhasha 2. Word Derivation- Aushadha, Bheshaja, Kalpana, Kashaya, Pancha kashaya Yoni, Samskara 3.Dravya/Varga Paribhasha- (Classical Names, English names,Chemical Composition/ Formula) A) Rasa, Maharasa, Uparasa, Dhatuvarga, Upadhatu, Ratna, Uparatna, Sudhavarga, Sikatavarga, Lavanavarga, Visha, Upavisha, Kajjali, Mitrpanchaka, Dravaka Gana, B) Sandigdha(Contraversial): Vaikranta, Chapala, Rasanjana, Pushpanjana, Vahnijara, Girisindura, Kankushtha. C) Anupalabdha (Not Available): Rasaka, Sauviranjana D) Krutrima (Artificial): Sasyaka, Gandhaka, Kasisa, Rasanjana, Hingula E) Pratinidhi (Substitute) : Vajrabhave Vaikranta, Suvarna-Suvarna Makshika 4. Prakriya Paribhasha- A) Shodhana: Types of Shodhana, Samanya Shodhana, Vishesha Shodhana, Different techniques used for Shodhana, Swedana, Mardana, Dhalana, Nirvapa, Nirjaleekarana, Nimajjana, Bhavana,Bharjana B) Marana,: Definition, Importance of Marana, Types of Marana- Agnipaka Method, Putapaka Method, Kupipakwa Method, Bhanupaka Method, Swanga Sheeta C) Amrutikarana, Lohitikarana D) Sattvapatana, Shuddhavarta, Beejavarta E) Druti: Definition, Druti lakshana F) Parada Samskara: Definition, Importance, Ashtasamskara Parada Jaranaa, Murchchhana, Names of Parad-Bandhas 5) Pramanikarana Paribhasha (Terms for Standardization)- A) Grahy-Agrahyattva, Siddhilakshana B) Bhasma pariksha: Varitara, Rekhapurnata, Unama,	1	10	8	4

	Slakshnattva, Sukshma, Anjana Sannibha, Dantagre na Kachakacha Bhavati, Varna, Avami, Apunarbhava, Niruttha, Gata Rasattva, Nischandrattva, Niramlattva, Nirdhumattva, Jihvagre adahyamanattva, Dadhi/ Nimbu Pariksha, 6) Puraka Paribhasha (Supplementary)- Rudra Bhaga, Dhanvantari Bhaga7) Mana-Paribhasha- A) Definition, Classical Types B) Classical and Modern- Conversion chart as per AFI, Scientific Metrology C) Essential Kala- mana.				
3	**3.Adharbhuta Siddhanta (Application of fundamental principles)** **Dravya Sangrha and Samrakshana** • Time of drug Collection • General Rules • Specific time for specific plant part collection • Time of the day for drug collection • Collection of Pranija Dravya • Place of Drug collection Bhumi mahabhuta predominance • Places from where drugs should not be collected • Stage of drug collection • Rule of Duplication(Dwiguna Mana Ganana) • Ardra and Shushka Dravya mana • Dravya Sangraha Vidhi and Dravya samrakshana • Rasa, Guna, Virya ,Vipaka, Prabhava**Anukta Visheshokta grahana:** Considering Anukta Dravya **Aushadha Namakarana:** Naming a Preparation **Aushadha Sevana Kala:** Time of Drug Administration **Saveeryata Avadhi** (Shelf life of different kalpana) **Aushadha Matra:**Dosage / Posology **Anupana & Sahapana (Adjuvant)** **Yougika Dravya Siddhanta(Drug Combination)**	1	05	4	2
4	**4.Yantropakaranani- I (Equipments and machineries) Principles involved, currently used yantras, their correlation, utility, and Instruments used in Large scale Production** Dola Yantra Valuka Yantra Puta Yantra Khalwa Yantra Patana Yantra Darvika Yantra Ulukhala Yantra Patala Yantra Kupi Yantra Arkapatana Yantra Pithara Yantra	1	05	6	4

	Sharava Yantra Palika Yantra Sthali Yantra Swedana Yantra Vidyadhara Yantra **Modern Machinery-**Grinder Disintegrator Pulverizer Powder Mixer Mechanical sifter Ball mill Granulator Dryer Tablet compressing machine Pills making machine Coating pan Polishing pan End runner machine Edge runner machine Capsule filling machine Ointment mixer Tube filling machine Sieves & Meshes Liquid filling machine Distillation plant Strip packing machine Pouch filling machine Pyrometer				
5	**5.Yantropakaranani -II (Equipments, fuel and Heating Devices)** **Principle involved, importance of temperature, currently used heating devices utility, quantum of heat and Instruments used in Large scale Production Puta-** Chandra Puta Surya Puta Maha Puta Gaja Puta Varaha Puta Kukkuta Puta Kapota Puta Lavak Puta Budhar Puta Gorvara Puta Valuka Puta Kumbha / Bhanda Puta **Musha** Samanya Musha Crucibles- Silica Mudra	1	05	5	4

	Sandhi Bandhan Material **Koshthi-** Chullika Angar Koshthi Satwapatan Bhrashtri Gas Stove Hot Plate Heating Mantle Induction Stove Hot Air Oven Muffle Furnace- Horizontal and Vertical **Heating Material-** Solid- Kashtha, coal(wooden / stone), Kshara, Lavana, Valuka, Shakrit, Dhanya Drava- Jala/ steam, Taila Indirect heating- Dhanya Rashi, Bhugarbha sthapana				
6	**6.Kalpana Nirmana I (Primary & Secondary dosage forms)** **Definition, classification with suitable examples, reference ingredients, quantity, method of preparation, principle involved, instruments used in small and large scale production, siddhi lakshana, storage, shelf life, modern aspect of related preparation of the following** **Panchavidha Kashya Kalpana (Primary dosage forms):** Swarasa, Kalka, Kwatha, Hima, Phanta **Upaklpana (Secondary dosage forms):** **Kalka:** Churna Kalpana **Kwatha:** Pramathya Kalpana, Paniya Kalpana, Ushnodaka, Ksheera Paka Kalpana, Laksha Rasa, Mamsa Rasa **Hima Kalpana :** Mantha Kalpana, Udaka Kalpana, Panaka Kalpana **Phanta Kalpana:** Arka	1	10	6	4
7	**7.Kalpana Nirmana-II (Method of Preparation of different dosage forms& Dietary Supplements))** **Avaleha** Definition, reference, essential ingredients, general method of preparation, specific rules of avaleha preparation, importance of temperature, siddhi lakshana, shelf life with examples i.e Vasavaleha, Kushmanda avaleha, research updates on Avaleha Kalpana, market survey **Sneha Kalpana** Aims of Sneha Kalpana, definition,reference, essential ingredients, general method of preparation, specific rules of sneha preparation, importance of temperature, gritha murchana, taila murchana, sneha siddhi lakshana, types of snehapaka, Patra(Gandha Paka), time duration to cook sneha preparation, shef life with examples Phala grita and	1	10	5	4

	Ksheerabala Bala Taila, Concept of Avartana, Research updates on snehakalpana, market survey **Sandhana Kalpana** Introduction, significance of sandhana kalpana, classification, difference between Madhya and Shukta Kalpana, general method of preparation, essential ingredients, anukta Mana, sandhana vidhi, observations, Burnig candle test, Lime water Test, important factors in Asava Arishta Preparation like sandhanan patra selection, place for fermentaion, importance of room temperature, sandhana kala, adding of honey, bhasma, prakshepaka dravya, difference between Asava & Arishta, shelf life and alcohol % with examples Draksharista and Usheerasava, Research updates on Sandhana Kalpana, market survey **Pathya Kalpana** Definition , significance of Pathya, types, general, method of preparation Manda, Peya, Yavagu, Vilepi, Anna or Odana Kalpana, Krashara, Yusha, Takra, Khada, Kambalika, Raga, Shadava, Related Research updates, Market survey of Dietary Supplements				
8	**8.Rasa Dravya Parichaya- I** **Synonyms, minerological identification, sources, types, grahya and agrahyata, doshas, shodhana, marana and other processing techniques, Probable Physico-chemical Changes, importance of temperature while processing , yoga, Research updates of the following** **Must to know Drugs** Parada (mercury) Abhraka (Biotite Mica) Makshika (Chalco-pyrite) Shilajatu(Asphaltum Punjabianum) Gandhaka (Sulfur) Gairika(Red Ochre) Kankshi (Alum) Haratala (Orpiment) Manahshila (Realgar) Kampillaka(Mallotus Philippinensis) Navasadara (Ammonium chloride) Hingula (Red Cinnabar) Swarna (Gold) Rajata (Silver) Tamra (Copper) Loha (Iron) Mandur (rust iron) Vanga (Tin) Naga (Lead) Yashada (Zinc) Mukta (Pearl), Pravala (Coral)	2	10	12	4

	Vajra (Diamond) Kaparda (Cowries) Shukti (Oyster Shell) Shankh (Conch Shell) Godanti (Gypsum) Samudraphena (Cattle Fish bone) Kukkutanda twak (Hen's EggShell) Tankana kshara (Borax)				
9	**9.Rasa Dravya Parichaya II** **Synonyms, mineralogical identification, sources, types, grahya and agrahyata, shodhana, marana and other processing techniques with probable chemical reactions, the importance of temperature, yoga, research updates of the following: Desirable to know drugs:** Sasyaka (Peacock ore) Kaseesa (Green Vitriol), Gauri pashana (Arsenic oxide); Trinakanta, Akika(Agate), Sudha (Lime stone), Khatika Ajashthi; Jaharmohara (Serpentine) Dugdhapashana (Talc)	2	5	7	6
10	**10.Rasadravya Parichaya III** **Synonyms, Minerological Identification, sources, types, Grahya, Agrahyata, Shodhana, Marana, Probable Chemical Changes, Properties,dose, Ashuddha/Apakwa Bhasma Sevanajanya Vydhi and their shantyupaya, yoga, Research updates** **Nice to know drugs:** Vaikrantha, Vimala (Iron Pyrite), Chapala Rasaka Anjana Kankustha Agnijara Giri Sindura (Red oxide of Hg) Mriddara shringa (Litharge) Kamsya (Bronze) Pittala (Brass) Vartaloha. Manikya (Ruby) Tarkshya (Emerald) Pushparaga (Topaz) Nilam (Sapphire) Gomeda (Zircon or Cinnamone stone)	2	5	3	6

	Vaidurya (Cats eye) Mriga shringa (Stag horn) Sikata (Silica) Vyomashma (Sangeyashab - Jade) Kousheyashma (Asbestos) Badarshama (silicate of lime)				
11	**11.Kalpana Nirman -III (Method of Preparation of different dosage forms)** **Sharkara Kalpana** • General method of preparation, difference between sharkara kalpana and syrup, importance of temperature, precautions, confirmatory tests, packing, preservation, shelf life with Example of Tulasi Arka Sharkara **Gudapaka** • General Method of Preparation, importance of temperature, precautions, confirmatory tests, packing, preservation, shelf life with Example of ManibhadraGuda, Guda Pippali **Lavana Kalpana** • General Method of Preparation, importance of temperature, precautions, confirmatory tests, packing, preservation, shelf life with Example of Narikela Lavana **Kshara Kalpana** • General Method of Preparation, importance of temperature, precautions, confirmatory tests, packing, preservation, shelf life with Example of Kadali Kshara, chincha Kshara **Ayskriti Kalpana** • General Method of Preparation, importance of temperature, precautions, confirmatory tests, packing, preservation, shelf life with Example Ayaskriti **Lepa Kalpana** • General Method of Preparation, importance of temperature, precautions, confirmatory tests, packing, preservation, shelf life with Example of	2	10	8	6

	Avalgunjadi Lepa, Keshavardhaka Lepa.				
12	**12.Chaturvidha Rasayana** **Introduction, definition, importance, types, Procedure, necessary equipment, Shelf life with following exampleKharaliya Rasayana**: Shwasakuthara rasa and Vatavidwansana rasa **Parpati Rasayana:** Loha parpati and sudha parpati **Kupipakwa Rasayana**: Rasasidhura and Rasa karpura **Pottali Rasayana**: Tamragarbha pottali and Loha grarbha pottali	2	10	4	4
13	**13.Current and emerging trend in Ayurvedic pharmaceuticals** **Cosmetics-Formulation, Regulatory Provisions**Brief Introduction to Cosmetics-Formulation, Regulatory Provisions, Plant Layout and other factory requirements, process used in the manufacture of Cosmetics, Most commonly used cosmetic Raw materials , Control of microbial contamination in the manufacture of cosmetics and Quality Control of cosmetics, Skin Sensitization Sensitivity Testing, In vitro-Tests for Skin Irritation, Quality Control of Raw materials, Intermediates and Finished Products, Stability of Cosmetics**Introduction to Dosage forms**Introduction, Classification of Dosage forms(Solid dosage forms, Liquid dosage forms and Semisolid dosage forms), Need of dosage forms.	3	5	3	4
14	**14.GMP(Schedule T) & Regulatory aspects of Ayurvedic drugs** **Brief overview of following** • **Drug and Cosmetics Act** 1940 and Rules1945 import, manufacture, sale distribution of drugs and cosmetics standards of quality, misbranded, adulterated, spurious drugs and cosmetics as amended from time to time. **New Acts related to Drugs and Devices.** • **Good Manufacturing Practices** (GMP) of ASU Drugs in accordance to Schedule- T **Food Safety and Standards Authority of India** (FSSAI) and **FDA** Approval Drugs.	3	5	2	4
Total Marks			**100**	**75 hr**	**57 hr**

Paper 2 Ayurvediya Aushadhi Prayoga Vigyana					
Sr. No	**A2 List of Topics**	**B2 Term**	**C2 Marks**	**D2 Lecture hours**	**E2 Non-Lecture hours**
15	**1.Aushadhi Prayoga Vigyana** Introduction, Ethymology, Scope of Aushadhi Prayoga vigyanaPrashastha bheshaja Lakshana	1	5	1	2
16	**2.Single drug (Herbal & Mineral)** **Single drug its variety of formulations and their different indications• Chemical/phytochemical composition** **• Pharmacodynamics and pharmacokinetics as per formulation** **• Therapeutic properties** **• Awasthanusara Uses(as applicable)** **• Matra** **• Anupana** **• Pathyapathya** **• Sevana Kala** **• Kala maryada (duration of medication as applicable)** **• Side effects of medication (as applicable)** **• Research updates and clinical evidences for each of the following formulations** **Guduchi** Guduchi Swarasa (Sha.Sam.Ma. Kh. Chp1/7 page 138) Guduchyadi Churna (B.R. Pleehayakrut Rogdhikara) Guduchi Kwatha (B.R. Jwaradhikara) Guduchi Hima (B.R. Chardi Rogadhikara) Guduchi Ghana- Samshamani Vati (AFI Part II Page 183) Guduchi Satva (AFI-Part I, Page 205) Amrutadi Guggulu (AFI-Part III, Page 107) Amritarishta (AFI Part I page 6) **Amalaki** Amalaki Swarasa (Sha.Sam.Ma.Kha.) Amalakyadi Churna (Sha.Sam.M.Kha. Churna kalpana) Triphala Rasayana (Cha.Chi. Rasayana Adhyaya) Chyavanaprasha (AFI Part I page 37) Dhatri Lauha (AFI Part I Page 284) Amalakyadi Gutika (Sha.Sam.Ma.Kha.Vati Kalpana) Phalatrikadi Kwatha (Sha.Sam.Ma.Kha.Kwatha Kalpana) Triphala Ghrita (Sha.Sam.Ma.Kha. Ghrita Kalpana) **Bhallataka** Bhallataka Modaka (B.R. Pleeha-Yakrit Rogadhikara) Bhallataka Ghrita (B.R. Gulma Rogadhikara) Bhallataka Guda (B.R. Arsha Rogadhikara) Bhallatakadi Taila (B.R. Nadivrina Rogadhikara) Bhallataka Avaleha (B.R. Arsha Rogadhikara)	1	10	8	2

	Bhallatakadi Lepa (B.R. Kushta Rogadhikara) Bhallatakadi Kwatha (B.R. Urusthabha Rogadhikara)Note: For Bhallataka additional ashuddha, avidhi sevanajanya vyadhi and their shantyupaya**Gandhaka** Gandhaka churna (SY page 217) Gandhaka Rasayana (AFI-Part II, Page 115) Gandhaka Druti (RRR 3rd Chapter) Gandhaka Taila (R.T. 8th Chapter) Gandhakadya Malahara (AFI-Part II, Page 165) Gandhakadi Lepa (RRS Shiroroga Chikitsa) Gandhaka Vati (B.R. Agnimandya Rogadhikara) **Gairika** Gairika Pradeha (Cha.Chi. Visarpa Rogadhyaya Laghusuta shekhara Rasa (AFI Part II Page 282) Gairikadya Malahara (AFI-Part III, Page 224) Gairikadya Gutikanjana (B.R. Netraroga) Gairika rasakriya (Cha.Chi.26/235) Varnakara lepa (Cha.Chi.25/117)				
17	**3.Single drug(Bhasma, Shuddha & Pishti)** **• Single drug/ formulation and its mode of action in different indications** **•Chemical/phytochemical composition** **• Pharmacodynamics and pharmacokinetics as per formulation** **• Therapeutic properties** **• Awasthanusara Uses(as applicable)** **• Matra** **• Anupana** **• Pathyapathya** **• Sevana Kala** **• Kala maryada (duration of medication as applicable)** **• Side effects of medication(as applicable)** **• Ashuddha apakwa, avidhi sevanajanya vyadhi and their shantyupaya,** **• Research updates and clinical evidences for each of the following formulations:** Abhraka Bhasma Swarna Makshika Bhasma Swarna Bhasma Rajata Bhasma Lauha Bhasma Tamra Bhasma Vanga Bhasma Naga Bhasma Yashada Bhasma Kasisa Bhasma Shuddha Shilajatu Shuddha Gandhaka Shuddha Gairika	2	15	12	6

	Shuddha Kankshi Mukta Pishti & Bhasma Pravala Pishti & Bhasma Vajra Bhasma Kaparda Bhasma Shankh Bhasma Godanti Bhasma Shuddha Tankana Shuddha Kankshi				
18	**4.Aushadhi Kalpa -I (Compound formulations)** **•Chemical/phytochemical composition** **• Pharmacodynamics and pharmacokinetics as per formulation** **• Therapeutic properties and its mode of action in different indications,** **• Awasthanusara Uses(as applicable)** **• Matra** **• Anupana** **• Pathyapathya** **• Sevana Kala** **• Kala maryada (duration of medication as applicable)** **• Side effects of medication(as applicable)** **• Ashuddha apakwa processed , avidhi sevanajanya vyadhi and their shantyupaya,** **• Research updates and clinical evidences for each of the following formulations:** **Kharaliya Rasayana** • Arogyavardhini Gutika : A.F.I. - I, Rasayoga, 20:4, R.R.S. Visarpa Chi. 20/106 • Kumara Kalyana Rasa : A.F.I. - I, Rasayoga, 20:9, B.R. Balaroga / 163 • Garbhapala Rasa : A.F.I. - II, Rasayoga, 16:14,R.T.Sa. Part - I, 140 Chandraprabha Vati : A.F.I. - I, Vati Gutika, 12:10,Sha.Sa.M.7/40 • Pravala Panchamrita Rasa : A.F.I. - II, Rasayoga, 16:37,B.R. Gulma / 139 • Anandbhairava Rasa : A.F.I. - I, Rasayoga, 20:3,R.Sa.Sa.Jwara 2/103 • Yogendra Rasa : A.F.I. - I, Rasayoga, 20:31,B.R. Vatavyadhi / 506 • Laxmivilas Rasa : A.F.I. - I, Rasayoga, 20:39, B.R. Rasayana / 55 • Vasantakusumakara Rasa : A.F.I. - I, Rasayoga,20:42,R.Sa.Sa.Rasayana Vajikarana / 80 • Vasantamalti Rasa : A.F.I. - I, Rasayoga, 20:41, Si.Bhai.Ma.Ma.Jwara / 60 • Brihat Vata Chintamani Rasa : A.F.I. - I, Rasayoga, 20:26,	2	15	16	4

	B.R.,Vatavyadhi/502 • Shankha Vati : A.F.I. - I,Vati Gutika, 12:32,B.R. Agnimandya / 182 • Shwaskuthara Rasa : A.F.I. - I, Rasayoga, 20:49,Yo.Ra., Swasa / Page 373 • Kamadudha Rasa : A.F.I. - II, Rasayoga, 16:9,R.Ta.Sa. Kharaliya Rasayana / 80 • Sutashekhar Rasa : A.F.I. - II, Rasayoga, 16:63,Yo.Ra. Amlapita / Page 125 • Navayasa Loha : A.F.I. - II, Lauha, 17:2,Cha.Sa.Chi.16/70 • Ichchhabhedi Rasa : A.F.I. - I, Rasayoga, 20:5,B.Ra. Udararoga / 84 • Krimikuthara Rasa : A.F.I. - II, Rasayoga, 16:12,R.Ta.Sa.Kharaliya Rasayana / P. 103 **Parpati Rasayana** • Panchamruta Parpati : A.F.I. - I, Parpati, 16:1, B.R.Grahani / 461 • Bola Parpati : A.F.I. - I, Parpati, 16:2, Yo.R.,Pradara / P 842 **Kupipakwa Rasayana** • Swarna Vanga : A.F.I. - I, Kupipakva, 15:9, Rasamruta 3/ 95 • Makaradhwaja : A.F.I. - I, Kupipakva, 15: 2, B. R. Vajikarana 2/ 237 • Sameerpannaga Rasa : A.F.I. - I, Kupipakva, 15:8, A.A.G.S. Part - 4 Page 88 **Pottali Rasayana** • Hemagarbha Pottali : A.F.I. - II, Rasayoga, 16:66, Rasamruta Rasavigyaniya 9/218				
19	**5.Aushadhi Kalpa-II (Compound Drugs/Formulations)** **• Chemical/phytochemical composition** **• Pharmacodynamics and pharmacokinetics as per formulation** **• Therapeutic properties and its mode of action in different indications,** **• Awasthanusara Uses(as applicable)** **• Matra** **• Anupana** **• Pathyapathya** **• Sevana Kala** **• Kala maryada (duration of medication as applicable)** **• Side effects of medication(as applicable)** **• Improperly processed , avidhi sevanajanya vyadhi and their shantyupaya,** **• Research updates and clinical evidences for each of the following formulations**: Dashamoola Kwatha (AFI Part I Page 55) Mahamanjistadi Kwatha (AFI Part I page 59)	3	15	14	2

	Pushyanuga Churna (AFI-Part I, Page 113) Sudarshana Churna (AFI Part I Page 116) Lavana Bhaskara Churna (AFI-Part I, Page 114) Bilvadi Gutika (AFI Part I Page 188) Chitrakadi Gutika (AFI-Part I, Page 186) Sanjivani Vati (B.R. Jwaradhikara) Vyoshadi Vati (AFI Part III Page 253) Bala Chaturbhadra Rasa (B.R. Balarogadhikara) Simhanada Guggulu (AFI-Part I, Page 71) Yogaraja Guggulu (AFI-Part I, Page 69) Chyavanaprashavaleha (AFI Part I page 37) Dadimavaleha (Y.R. Jwaratisaradhyaya) Panchagavya Ghrita (AFI Part I Page 90) Brahmi Ghrita (AFI Part I Page 93) Narayana Taila (AFI Part I Page 138) Neelibhringadi Taila (AFI Part I Page 139) Panchaguna Taila (AFI-Part II, Page 145) Aravindasava (AFI Part I page 7) Ashokarishta (AFI Part I page 8) Kumaryasava (AFI Part I page 10) Kutajarishta (AFI Part I page 10) Gandhakadya Malahara (AFI-Part II, Page 165) Lepa Guti (AFI Part III page 232)				
20	**6.Dosage Forms & Cosmetic Products** Definition of dosage form,-Cosmetics Advantages and disadvantages of currently available dosage forms and cosmetics. Route of their administration. Research updates on modification of classical Ayurvedic dosage forms and relevant case studies.	3	5	5	2
21	**7.Nutraceuticals** **Introduction** **Types, non Indian nutraceuticals and their uses** **Ayurvedic Perspective of Nutraceuticals** **with special reference to dietic preparation, rasayana with one examples for each category , mode of action, nutritional value calculation, research updates and case studies on below mentioned category** **General Health** : Kushmanda avaleha **Pediatric Health**: Preenana Modaka(Kashyapa) **Geriatric Health**: Chavanaprasha avaleha **Reproductive Health**: Phala Grita **Women's health:** Soubhagya shuntipaka, Shatavari grita **Cardio-protective**: Arjuna Ksheerapaka & Rasona ksheera paka **Sports endeavor**: Kharjuradi mantha **Mental health**: Brahma Rasayana	3	5	6	1
22	**8.Anupana Prayoga for Aushadhi Kalpa**	3	5	4	1

	Properties of Anupana **Factors to be considered for selection of Anupana** **•Dosha** **•Aushadha** **•Roga/ Rogi** **•Ahara** **Purpose of Anupana** **Contraindications of Anupana** **Eka Kalpa Vydi anusara aneka Anupana for following yogas** **1.Kaishore Guggulu:** Sarangadhar Samhita , Madhyam khanda- 7/72-81, P: 136**2. Yogaraj, Guggulu:** Sarangadhar Samhita Madhyam khanda- 7/56-69, P:135**3. Narayana Churna**: Sarangadhar Samhita of Pandit Sarangadharacharya, , Madhyam khanda- 7/83-91, P:123-124**4.Rasa Sindoor:** RasaTarangini Hindi commentary of Sri Sadananda Sarma,Chaukhambha Surbharti, Murcchana vigyaniya Taranga, 6/203-234, P: 125-127**5. Rasa Parpati:** Rasa Tarangini of Sri Sadananda Sarma,Chaukhambha Surbharti Prakashan, Murcchana vigyaniya Taranga, 6/144-153, P: 116-117**6.Kankayan Vati** : Sarangadhar Samhita Surbharti Prakashan, Madhyam khanda, 7/50-55, P: 134-135)				
23	**9.Aushadhi Prayoga Marga** **Introduction** **Types in ayurveda** **Advantages and disadvantages of each aushadhi prayoga marga and probable mode of action after administration of following dosage forms in below mentioned routes** 1. Mukha (Oral Cavity): Vati, Gutika, Churna, Asava, Arishta,Kashaya, Avaleha, Khanda, Sneha (Ghrita/Taila), 2. Nasa(Nasal Route)- Dosage form used - Churna, taila, swarasa, arka 3. Karna (Through Ear)- Taila, Ghrita 4. Akshi (Through Eyes)- - Ghrita, Taila, 5. Twak (Through Skin)- Lepa, Alepa, Pralepa, Malahara, upanaha,pradeha, abhyanga, udvartana • Shirodhara - Takra • Abhyanga- Sahacharadi Taila • Ashti Bhagna- Murivenna Taila • Vrana- Jatyadi Taila • Smashru – Shankha Bhasma • Kesha Ghanata- Bringaraja Taila • Akala Palita – Hasthi Danta Masi • Indralupta – Icchabhedi Rasa • Lomashatana – Lomashatana Lepa 6. Guda (Anal Route)- Dosage forms - Vartis, taila, ghrita, kalka, churna, kashaya 7. Mutra marga (Through urethra)- Uttara Basti with	3	10	5	1

	Dosage forms- Taila, ghrita 8. Yoni marga (Through vagina)- Yoni Dharana, Yoni Dhavana, Yoni Pichu, Yoni Dhoopana				
24	**10.Rational prescription along with safe dispensing of Ayurvedic formulations.** Rational prescription along with safe dispensing of Ayurvedic formulations as per NABH guideline	3	5	1	4
25	**11.Traditional & Local health Practices** Introduction to Traditional & Local health Practices and Government initiatives to preserve it. Brief introduction to TKDL	3	5	2	4
26	**12.Pharmacovigilance for Ayurveda drugs** Pharmacovigilance and Adverse Drug Reactions (ADR) Pharmacovigilance Programme of Ayurveda, Siddha, Unani and Homeopathy (ASU & H) Drugs Central Sector Scheme and Centres of Pharmacovigilance of ASU & H Drugs	3	5	1	4
Total Marks			**100**	**75 hr**	**33 hr**

Table 3: Learning objectives (Theory) of Course

Paper 1 Ayurvediya Aushadhi Nirmana Vigyana									
A3 Course outcome	**B3** Learning Objective (At the end of the session, the students should be able to)	**C3** Domain/sub	**D3** Must to know / desirable to know / Nice to know	**E3** Level Does/ Shows how/ Knows how/ Know	**F3** T-L method	**G3** Assessment (Refer abbreviations)	**H3** Formative/ summative	**I3** Term	**J3** Integration
Topic 1 1.Chronological development of Ayurvediya Aushadhi Nirmana (Lecture :2 hours, Non lecture: 1 hours)									
CO1	Explain historical evolution of Ayurvediya aushadhi nirman and Rasashastra.	CK	MK	K	L&GD	TT-Theory	F&S	I	
CO1	Describe about contribution of Nagarjuna Acharya to Rasashastra	CK	MK	K	L_VC	TT-Theory	F&S	I	
CO1	Enlist important classical texts of Rasashastra and describe their unique features in short.	CK	DK	K	L&PPT	TT-Theory	F&S	I	
CO1	Describe structure of Pharmacy and enlist formulations prepared in pharmacy, after visiting the unit of teaching pharmacy of own campus	CC	MK	KH	L&GD	CL-PR	F	I	
CO1	Describe Recent development in Ayurvedic Pharmaceuticals viz, new dosage forms, pharmaceutical modification techniques.	CK	DK	K	L&PPT	TT-Theory	F&S	I	
CO1	Define Rasa and Rasayana and describe difference between Rasa and Rasayana	CK	DK	K	L&PPT	T- MEQs	F	I	

CO1	Justify design of ancient Rasashala	AFT-VAL	NK	KH	SDL	PRN	F	I	
Topic 2 2.Paribhasha (Terminology) (Lecture :8 hours, Non lecture: 4 hours)									
CO1	Explain the term Paribhasha and its importance in Ayurvediya Aushadhi Nirmana.	CK	MK	K	L	T-CRQs	F	I	
CO1	Discribe the terms Aushadha, Bheshaja, Kalpana, Kashaya, Kashaya yoni, Samskara- based on their word derivations	CC	MK	K	L	T- EW	F&S	I	
CO1	Enlist sequentially - names of all drugs classified in the varga(group). Recite shlokas of Maharasa, Uprasa , Sadharana Rasa Varga from Rasaratnasamuchchaya.	CC	MK	K	EDU,SDL,GBL,REC	P-REC,P-ID,PUZ,O-QZ	F&S	I	
CO1	Enlist and discuss Sandigdha, Krutrima, Pratinidhi and Anupalabdha dravya.	CK	DK	K	L&PPT,SDL,GBL	P-ID,CL-PR	F	I	
CO1,CO2	Discribe the definition of the term Shodhana. Explain with examples different techniques used for the procedures of Shodhana.	CAP	MK	KH	L&GD,L_VC,PT	T- MEQs,P-EXAM,O-QZ,O-GAME	F&S	I	
CO1	Explain the term Marana and describe its types with examples	CK	MK	K	L&PPT,LS	T-OBT	F&S	I	
CO1	Enlist all relevent prakriya paribhasha of Amrutikarana, Lohitikarana,Sattvapatana, druti and discuss with examples	CK	DK	K	DIS,LS	PRN	F	I	
CO1,CO2	Recite sequentially names of Parada Ashta samskara. Explain the terms Jarana Murchchhana and cite types with examples. Compare Jarana and Murchchhana.	CC	MK	KH	L_VC,PrBL	T-EMI,T- MEQs,PRN,M-CHT	F&S	I	

CO1	Identify names of Parada Bandhas	CK	NK	K	LS	T-OBT	F	I	
CO1,CO2,CO5	Describe Grahyagrahya parameters used for selection of Rasadravyas.	CK	MK	SH	L&PPT,PrBL	T- EW	F&S	I	
CO1,CO2,CO5,CO6	Illustrate all Bhasma pariksha as per classical description.	CC	MK	KH	L_VC,IBL,DA,D	T- MEQs,P-EXAM,CHK	S	III	
CO1,CO2,CO5	Define the word Siddhilakshani.Recite examples of classical siddhilakshani. Interpret its rationality	CE	MK	KH	L&PPT,SDL,REC,D_L	T- MEQs,P-EXAM	F&S	I	
CO1	Recognise and discuss Dhanvantari Bhaga and Rudra bhaga	CC	NK	K	RLE	C-INT	F	I	
CO1	Explain importance of Mana-paribhasha and classical types of Mana. Recall Charts of Mana .	CK	DK	KH	L&PPT,PSM	T-CRQs,P-SUR	F	I	
CO1,CO2	Categorize parameters of Drug Standardization and develop a checklist for assessment of quality of rasadravyas	CE	DK	KH	BS,IBL,TPW,SDL	CL-PR,WP,CHK	F&S	I	
CO2	Explain Value of selection of genuine raw material	AFT-VAL	MK	KH	DIS	DEB	F	II	
CO2,CO3	Explain importance of ethical practices for drug processing(Shodhan, Marana)	AFT-VAL	MK	K	PrBL	P-POS	F	II	
CO2,CO3	Discuss and justify importance of Bhasma Pariksha	AFT-RES	MK	KH	BS	T- EW	F&S	III	

CO2,CO3	Explain nalue of keen and accurate application of weights and measures in Ayurvediya Aushadhi nirmana	AFT-VAL	DK	K	L&GD	PRN	F	II	
Topic 3 3.Adharbhuta Siddhanta (Application of fundamental principles) (Lecture :4 hours, Non lecture: 2 hours)									
CO1,CO2	Elaborate fundamental principles of Ayurvediya Aushadhi Nirmana alongwith their classical references and discuss their application with classical examples of various kalpas.	CC	MK	KH	L&PPT,BS	T- EW,M-POS	F&S	I	
CO1,CO2	Explain Dravya Samgraha vidhi. Explain types of Bhumi desha and types of drugs to be collected from paricular place & places from where Dravya should not be collected.	CC	MK	KH	L&PPT,DIS,BS	T- EW	F&S	I	H-DG
CO1,CO2	Describe time of Dravya collection and explain rationality behind it.	CC	MK	KH	L&PPT,BS	T- EW	F&S	I	H-DG
CO1,CO2	Enlist parts of Sthavara & Jangama Dravyas used for Ayurvediya Aushadhi nirmana.	CC	MK	KH	L&GD,BS	T- EW	F&S	I	H-DG
CO1,CO2	Define Samskara. Discuss role of Samskara in Ayurvediya Aushadhi Nirmana alongwith various examples.	CC	MK	KH	L&PPT,BS	T- EW	F&S	I	H-Samhita
CO1,CO2	Discribe Ardra - Shushka Dravya & Anukta – Visheshokta Dravya collection principles.	CC	MK	KH	L&PPT,DIS	T- EW	F&S	I	H-DG
CO1,CO2	Describe importance of kalpa sevan matra. Explain factors considered for deciding dosage of any drug (Ayurvedic as well as modern medicine principles). Describe Posology	CC	MK	KH	L&PPT,BS	T- EW	F&S	I	
CO1,CO2	Explain Saveeryata Avadhi(Shelf life) of Ayurvedic dosage forms.	CK	DK	K	L&PPT,DIS	T- MEQs,P-VIVA	F&S	I	
CO1,CO2	Discuss Yogika Dravya Sidhdhanta(Drug combination)	CC	MK	KH	L&PPT,BS	T- EW	F&S	I	
CO1	Explain importance of Kala (Time) Samskara in Ayurvediya	CK	MK	K	L&PP	TT-Theory	F&S	I	

	Aushadhi Nirmana. Elaborate Aushadhi sevana kala mentioned in Sharangdhara samhita. Discribe chrono- Therapeutics.				T				
CO1	Justify Aushadhi kalpa namakarana siddhanta with examples	CC	DK	KH	IBL	CL-PR	F	I	
Topic 4 4.Yantropakaranani- I (Equipments and machineries) (Lecture :6 hours, Non lecture: 4 hours)									
CO1,CO5	Choose and record contemporary machines used in Ayurvedic drug preparation.	CC	DK	K	L&PP T,DIS	T- EW	F&S	I	
CO1,CO5	Discuss the pharmaceutical use of Distillation apparatus, Ball Mill, Pulveriser, End Runner, Edge Runner, Tablet compression machine, Capsule filling machine, Pouch filling machine, Liquid filling machine in Ayurvediya Aushadhi Nirmana	CC	DK	K	L&PP T,DIS	T- EW	F	I	
CO1,CO5	Describe the principles behind construction and working of the classical Yantras used for Ayurvediya Aushadhi nirmana.	CAP	MK	KH	L&PP T,DIS	T- MEQs,P-VIVA	F&S	I	
CO1,CO5	Enlist categorical information about the following Yantras in the charts- Ulukhal Yantra, Patan Yantra, Jarana Yantra, Patala Yantra and Swedana Yantra.	CK	DK	K	L&PP T,DIS	T- EW	F	I	

CO1,CO5	Interpret the mechanism and effect of Yantras / machines on the Physical and Chemical properties of the drug material.	CC	DK	KH	DIS,IBL	M-POS	F	I	
CO1	Enlist Ayurvediya aushadhi kalpana and equipments/yantras/ machines used for preparation of each kalpana.	CK	DK	K	L&PPT	T- EW	F	I	
Topic 5 5.Yantropakaranani -II (Equipments, fuel and Heating Devices) (Lecture :5 hours, Non lecture: 4 hours)									
CO1,CO5	Describe the term Yantra and enlist yantras described in classics useful for aushadhi nirmana. -	CK	DK	K	L&PPT	TT-Theory	F	I	
CO1,CO5	Define the term Puta and recite its classical explanation.	CK	MK	K	L_VC,RLE	T- EW,M-POS	F&S	I	
CO1,CO5	Produce categorical information(Size of Pit, Number of cowdunkcakes, use etc.) about following Putas viz. Mahaputa, Gajaputa, Varahputa, Kukkutaputa, Kapotputa, Lavakputa, Kumbhaputa, Bhandaputa, Valukaputa and Bhudharputa.	CK	MK	K	L&PPT,DIS,TPW	T- EW,M-POS,COM	F&S	I	
CO1,CO5	Recognise the principles behind construction and working of the classical Putas.	CC	MK	KH	L&PPT,DIS,IBL	T- EW,M-POS	F&S	I	
CO1,CO5	Identify and enlist contemporary devices used in the preparation	CC	DK	K	L&PP	T- MEQs,QZ	F&S	I	

	of Bhasma.				T,DIS ,IBL	,M-POS			
CO1,CO5	Review the temperature pattern of various Putas by referring research articles.	CC	DK	K	TPW, SDL	QZ ,M-POS	F&S	I	
CO1,CO5	Compile names and significance of temperature measuring devices with reference to Puta.	CK	DK	K	DIS, ML	CL-PR,M-POS	F	I	
CO1,CO5	Enlist the specific Puta used for a particular Bhasma Nirmana.	CC	DK	KH	L&PPT	CL-PR,M-POS	F	I	
CO1,CO5	Enlist various devices used for heating during Ayurvediya Aushadhi nirmana.	CK	DK	K	L,DIS ,RLE, FV	T- EW,P-SUR	F&S	I	
CO1,CO5	Enlist constituents needed for Samanya Musha Nirmana.	CK	DK	K	L&PPT,IBL	T- MEQs	F&S	I	
CO1,CO5	Define the term Musha and describe uses of various types of Musha.	CK	DK	D	L_VC ,D-M	T-OBT	F&S	I	
CO1,CO5	Enlist and discuss the material used for Sandhi Bandhan (while using Sharava and Kachakupi)	CK	NK	K	DIS,RLE	T-OBT	F	I	
CO1,CO5	Identify and record the types of Crucibles .	CK	NK	K	L&PPT	M-POS	F	I	

CO1,CO5	Interpret the effect of heat transformation in the material subjected to heating through Musha.	CAP	DK	KH	L&PPT,DIS,D-M	PRN,CL-PR	F	I	
CO1,CO5	Recall Pakaj Utpatti Siddhant and interpret it for Agni Sannikarsha Sanskara.	CC	DK	KH	L&PPT,DIS	T- EW,CR-RED	F&S	I	
CO1,CO5	Explain the Pharmaceutical use of the Hot plate, heating mantle, induction stove, hot air oven, muffle furnace (horizontal and vertical type)	CC	NK	KH	DIS,SDL	P-SUR,M-POS	F	I	
CO1	Describe types of Koshthi and their uses	CK	DK	K	L	COM	F	I	
CO1,CO5	Describe the Current trends in heat transfer device e.g. steam jacketed heating device, programmed muffle furnace, programmed furnace for Parpati / Pottali preparation.	CC	DK	K	L&PPT,IBL,SDL	M-POS,COM	F	I	
CO1,CO5	Assess and interpret the effect of fuel in quantum of heat given (time and temperature)	CC	DK	KH	DIS,PrBL	M-POS,CR-RED	F	I	
CO1,CO5	Enlist various fuels used for heating for estimation of their heat value.	CK	NK	K	IBL,SDL	M-POS	F	I	
CO2,CO3	Analyse and appraise use of proper heating device and fuels used for Ayurvediya Aushadhi Nirmana.	AFT-SET	DK	KH	BS	DEB	F	II	
Topic 6 6.Kalpana Nirmana I (Primary & Secondary dosage forms) (Lecture :6 hours, Non lecture: 4 hours)									
CO1,CO2	1. Explain Kashaya kalpana 2. Enlist the dosage form come under Panchavidha Kashaya	CC	MK	KH	L	T- EW,P-VIVA	F&S	II	

	Kalpana and their Upakalpana 3. Justify Primary , secondary and tertiary dosage form under Panchavidha kashaya Kalpana and their Upakalpana								
CO1	Define with synonyms and classify different varieties of the dosage form in Ayurvediya Aushadhi nirmana	CK	MK	K	L	T- EW,P-VIVA	F&S	II	
CO1	Describe methods of preparation of the dosage form along with the principles of extraction, concentration and dilution etc.	CC	MK	KH	L&PPT	T- EW,P-VIVA	F&S	II	
CO1,CO2	Explain in details about Standard Operating Procedure (SOP) of each kalpana.	CC	MK	KH	L&PPT,DIS	T- EW,P-VIVA	F&S	II	
CO1,CO3	Enlist details of the applications/administration (samanya Matra, Anupana or sahapana, indications and contraindications) of the dosage form with various examples	CC	MK	K	L&PPT	T- EW,P-VIVA	F&S	II	
CO1,CO6	Assess and discuss modern day development and market trend of the dosage form	CC	DK	K	L&GD,IBL,LS	T- MEQs,P-SUR	F&S	II	
CO1	Determine the advantages and disadvantages of the dosage form	CC	DK	K	L	T- EW,P-VIVA	F&S	II	
CO2	Describe method of preparation of dosage form along with the principle involved	CK	MK	K	L&PPT,DIS	T- EW,P-VIVA	F&S	II	
CO1	Describe meaning of the term Upakalpana. Enlist panchavidha kashaya kalpana and their respective Upakalpana	CK	DK	K	L	T- MEQs,P-VIVA	F&S	II	
CO1	Explain various kalpas belonging to Various dosage forms	CK	MK	K	L_VC	P-EXAM	S	II	

	-Ingredients, proportion, matra, sevan vidhi if any, therapeutic uses				,PT				
CO2	Critically evaluate rationality behind different proportion of water used in various formulations	AFT-VAL	DK	KH	BS	P-VIVA	F&S	III	
Topic 7 7.Kalpana Nirmana-II (Method of Preparation of different dosage forms& Dietary Supplements)) (Lecture :5 hours, Non lecture: 4 hours)									
CO1,CO5	Explain the basic principles involved , processing techniques,quality control parameters used/ involved in the preparation of Avaleha, Kalpana with examples ,instruments used in small and Large scale production,Research updates	CAP	MK	K	L&PPT,TPW,BL	T- EW,T-OBT	F&S	II	
CO1,CO5	Explain the basic principles involved , processing techniques,quality control parameters used/ involved in the preparation of Sneha Kalpana, Kalpana with examples ,instruments used in small and Large scale production,Concept of Avartana, Research updates on Snehakalpana, Market survey	CK	MK	K	L_VC,TUT	T- EW,P-VIVA	F&S	II	
CO1,CO4	Describe the Significance of sandhana kalpana, classification, Difference between Madya and Shukta Kalpana, general method of preparation, essential ingredients, Anukta Mana, Sandhana Vidhi, observations, Burnig candle test, Lime water Test, difference between Asava and Arishta, essential knowlege of sale and clinical practice , Research updates	CAP	MK	K	L_VC,PrBL	T- EW,T-OBT	F&S	II	
CO1,CO3,CO5	Explain Definition , significance of Pathya, types, general, method of preparation Manda, Peya, Yavagu, Vilepi, Anna or Odana Kalpana, Krushara, Yusha, Takra, Khada, Kambalika, Raga, Shadava, Related Research updates, Market survey of Dietary Supplements and Nutraceuticals	CAP	MK	KH	L_VC,RLE	T- EW,P-VIVA,P-EXAM	F&S	II	
Topic 8 8.Rasa Dravya Parichaya- I (Lecture :12 hours, Non lecture: 4 hours)									
CO1		CC	MK	K	L&PP	T- MEQs,P-	S	I	

	Enlist synonyms of Rasadravya and explain significance of that				T,D_L	VIVA			
CO1,CO2,CO6	Explain classical & Mineralogical identification and Sources of Rasadravyas	CC	MK	SH	L&PPT,PT	T- EW,P-EXAM	F&S	I	
CO1,CO2	Discriminate types, Grahya-Agrahyata and Dosha of Rasadravya	CC	MK	KH	L&PPT,PT	P-VIVA,TT-Theory	F&S	I	
CO1,CO2	Explain Shodhan and Marana and other processing techniques of the Rasa- Dravya.	CC	MK	KH	L_VC,IBL,D	T- EW,P-VIVA,INT	F&S	I	
CO1,CO2,CO6	Discuss probable physical, chemical changes occuring during process & after Shodhana and Marana of Parada, Haratala, Tamra and Shankha.	CC	MK	KH	L&PPT,BS,SDL	T- EW,P-VIVA,P-EXAM	F&S	I	
CO6		CC	DK	KH	DIS,B	P-VIVA	F&S	I	

	Explain research updates about Shilajatu,Naga,Mukta and Kapardika.?				S				
CO1,CO2,CO6	Discuss probable physical, chemical changes occuring after Bhavana, Puta & whole process of Bhasma nirmana from Rasadravyas	CC	MK	KH	DIS,BS	T-OBT	F&S	I	
CO1,CO4	Enlist Kalpas prepared from these Rasdravyas and therapeutic imortance of that Rasadravya	CK	DK	K	IBL,SDL	PRN	F	II	
CO2,CO3	Develop checklist for identification of genuine rasadravyas	AFT-CHR	MK	K	IBL	P-PS	F&S	III	
Topic 9 9.Rasa Dravya Parichaya II (Lecture :7 hours, Non lecture: 6 hours)									
CO1	Enlist the important synonyms of Rasadravyas	CC	DK	KH	L&PPT,DIS	P-VIVA	F&S	II	
CO1,CO6	Explain classical & Minerological identification and their Sources.	CK	DK	K	L&PPT,D_L	P-VIVA	F&S	II	

CO1	Elaborate types, Grahya-Agrahyata and Dosha of Rasadravyas	CK	DK	K	L&PPT	P-VIVA	F	II	
CO1,CO2	Explain Shodhana, Marana & and other processing techniques with probable chemical reactions.	CC	MK	KH	L&PPT,DIS,LS	T- EW,P-VIVA	F&S	II	
CO1,CO2	Explain Shodhana, Marana & and other processing techniques with probable chemical reactions.	CE	DK	K	L&GD,PT	P-VIVA	F&S	I	
CO6	Explain research updates of Kasisa,Gauripashana and Akika.	CC	DK	KH	DIS, ML	PRN	F	I	
CO1,CO5	Enlist names of rasadravyas and important kalpas prepared from respective dravya. Describe therapeutic importance of that Rasadravya.	CK	DK	K	DIS,SDL	CL-PR,M-CHT	F	II	
Topic 10 10.Rasadravya Parichaya III (Lecture :3 hours, Non lecture: 6 hours)									
CO1	Enlist Synonyms and sources.	CK	NK	K	PrBL, TPW, PER	T-OBT,M-CHT	F&S	II	

CO1,CO6	Determine types, Grahya-Agrahya, properties & classical as well as Mineralogical Identification of Rasadravyas	CC	NK	K	L&PPT,DIS,SDL	P-VIVA,CHK	F&S	II	
CO1,CO2	Explain Shodhana, Marana and Probable Chemical Changes.	CC	DK	K	L&PPT,IBL	PRN	F&S	II	
CO6	Explain research update of Badarashma.	CK	NK	K	DIS,LS	P-VIVA	F	II	
CO1,CO5	Enlist Rasadravyas from this group and describe important kalpas with their therapeutic utility	CK	DK	K	TPW	PRN	F	II	
Topic 11 11.Kalpana Nirman -III (Method of Preparation of different dosage forms) (Lecture :8 hours, Non lecture: 6 hours)									
CO1,CO2,CO3	Describe sharkara kalpana along with preparation method of Syrup.Explain therapeutic importance of prepared sharkara kalpana along with its shelf life.	CC	NK	K	L&PPT,SDL	P-VIVA	F&S	II	
CO1,CO2,CO3	Describe Gudapaka preparation method with its confirmatory tests and precautionsExplain therapeutic importance of prepared Gudapaka along with its shelf life.	CC	NK	K	L&PPT	P-VIVA	F&S	II	
CO1,CO2,CO3	Describe Lavana kalpana preparation method with its confirmatory tests and precautionsExplain therapeutic	CC	DK	K	L&PPT	T-CRQs,P-VIVA	F&S	II	

	importance of prepared Lavana kalpana along with its shelf life and packaging techniques.								
CO1,CO2,CO 3	Describe Kshara kalpana preparation method with its confirmatory tests and precautionsExplain therapeutic importance of prepared Kshara kalpana and Ksharasutra integration with Shalya tantra department along with its shelf life and packaging techniques.	CAP	MK	KH	L&PP T	P-VIVA,TT-Theory	F&S	II	V-SHL
CO1,CO2,CO 3	Describe Ayaskriti kalpana preparation method with its confirmatory tests and precautionsExplain therapeutic importance of prepared Ayaskriti kalpana along with its shelf life and packaging techniques.	CC	NK	KH	L&PP T	P-VIVA	S	II	
CO1,CO2,CO 3	Describe Lepa kalpana preparation method with its confirmatory tests and precautionsExplain therapeutic importance of prepared Lepa kalpana, integration with Kayachikitsa and Panchakarma department along with its shelf life and packaging techniques.	CC	MK	K	L&PP T	T- EW,P-VIVA	F&S	II	V-KC ,V-PC
Topic 12 12.Chaturvidha Rasayana (Lecture :4 hours, Non lecture: 4 hours)									
CO1,CO2	Describe importance and unoque features of Chaturvidha Rasayana - Kharaliya Rasayana, Parpati Rasayana, Kupipakwa Rasayana & Pottali Rasayana.	CC	MK	KH	L&PP T,IBL	T- EW,P-VIVA	F&S	II	
CO1,CO2	Explain definition, types and method of preparation of Chaturvidha Rasayana.	CAP	MK	D	L&PP T,PT	T- EW	F&S	II	

CO1,CO2	Determine role of Yantra, Agni & Kala for pharmaceutical process of chaturvidha rasayana	CAN	DK	KH	PT	T- EW,P-VIVA	F&S	II	
CO6	Explain shelf-life of Chaturvidha Rasayana.	CAN	DK	SH	L,DIS	P-VIVA	F&S	II	
CO5	Describe chemical changes occuring during the preparation of chaturvidha rasayana and its impact on Pharmacological action of Chaturvidha Rasayana	CAN	DK	KH	L&GD,BS,SDL	CR-RED,CR-W	F	II	
CO5	Explain law of Definite proportion and proportion of Mercury and sulphur needed for preparation of sulphide of Mercury. in Chaturvidha rasayana	CAP	DK	KH	BS,IBL	CL-PR	F	II	
Topic 13 13.Current and emerging trend in Ayurvedic pharmaceuticals (Lecture :3 hours, Non lecture: 4 hours)									
CO1,CO5,CO6	**Discuss the classfication of different dosage forms.**	CK	DK	K	L&PPT,DIS	P-VIVA,M-POS	F&S	III	
CO1,CO5,CO6	Explain the need of different dosage forms.	CK	DK	K	L&PPT,DIS,SDL	P-VIVA,M-POS	F&S	III	
CO1,CO5,CO	Enlist categorical information about the cosmetics used in daily	CK	DK	K	L_VC	PRN,M-POS	F	III	

6	routine. Appreciate Ayurvedic cosmetic products.				,DIS, FV				
CO1,CO5	Appreciate Ayurvedic cosmetic products.	AFT-VAL	DK	KH	BS,Pr BL	PRN,P-SUR	F	III	
CO1,CO5,CO 6	Choose and record the contemporary machineries used in the manufacture of cosmetics.	CK	NK	K	L_VC ,DIS, SDL	M-POS	F	III	
CO1,CO5,CO 6	Enlist Quality Control parameters of cosmetics preparations.	CK	DK	K	L&PP T,DIS	P-VIVA,M-POS	F&S	III	
Topic 14 14.GMP(Schedule T) & Regulatory aspects of Ayurvedic drugs (Lecture :2 hours, Non lecture: 4 hours)									
CO5	Explain the legal and regulatory aspects of manufacturing, and sale of Ayurvedic drugs.	CC	MK	K	L&PP T,IBL	CL-PR	F&S	III	
CO5	Describe acts and rules mentioned in Drug & Cosmetic Act 1940 & Rule 1945 and their relevance to Ayurvedic, Siddha, Unani (ASU) drugs.	CC	MK	K	L&G D,BS	QZ	F&S	III	H-DG
CO5	Discuss the guidelines of Food Safety and Standards Authority of India (FSSAI) and FDA.	CK	DK	K	L&G D,SD L	CL-PR	F	III	
CO3,CO5	Determine the principles and practice of establishment of Ayurvedic pharmacy.	CK	DK	K	L&G D,TP W	P-EN,CL-PR	F	III	
CO5	Discuss the NABL guidelines for testing laboratory (Chemical).	CK	NK	K	L&PP T,D_	CL-PR,CHK	F&S	III	

					L				
CO1,CO5	Explain long forms of these - (FSSAI) and (FDA),(CCRAS),(DCGI), (CDSCO)	CK	DK	K	L	T-EMI	S	III	
CO4	Discuss ethical aspect of large scale drug preparation in Ayurvedic Pharmacies	AFT-VAL	DK	K	DIS	CL-PR	F	III	

Paper 2 Ayurvediya Aushadhi Prayoga Vigyana									
A3 Course outcome	**B3** Learning Objective (At the end of the session, the students should be able to)	**C3** Domain/sub	**D3** Must to know / desirable to know / Nice to know	**E3** Level Does/ Shows how/ Knows how/ Know	**F3** T-L method	**G3** Assessment	**H3** Formative/ summative	**I3** Term	**J3** Integration
Topic 1 1.Aushadhi Prayoga Vigyana (Lecture :1 hours, Non lecture: 2 hours)									
CO1	Define Aushadhi Prayoga Vigyana and its scope and enlist prashasta bheshaja laxana	CK	MK	K	L	TT-Theory	F&S	I	
Topic 2 2.Single drug (Herbal & Mineral) (Lecture :8 hours, Non lecture: 2 hours)									
CO1,CO2,CO4,CO5,CO6	Describe different dosage forms prepared out of a single herb or mineral	CK	MK	KH	L_VC	P-VIVA,COM,TT-Theory	F&S	I	
CO1,CO2,CO4,CO5,CO6	Appreciate how the therapeutic efficacy varies depending on the dosage form	AFT-VAL	MK	K	L&PPT	T- EW,DEB	F&S	I	

CO1,CO2,CO4,CO5,CO6	Describe therapeutic efficacy of different formulations of Vishadrvya (Bhallataka), with its toxic effects and remedy.	CK	NK	K	L&GD	P-VIVA	F	I	
CO1,CO5	Describe therapeutic efficacy of different formulations of Guduchi, Gairika, Gandhaka	CC	MK	K	L&GD,PER	P-VIVA,TT-Theory	F&S	III	
CO3,CO4	Aappraise multiple factors considered for preparation of various dosage forms from a single drug and creat list of more such examples.	AFT-CHR	DK	KH	BS,IBL	COM	F	III	
Topic 3 3.Single drug(Bhasma, Shuddha & Pishti) (Lecture :12 hours, Non lecture: 6 hours)									
CO2,CO6	Explain chemical form/composition, Pharmacodynamics and pharmacokinetics of Abhraka, Loha and Godanti Bhasma.	CC	DK	KH	L&PPT,DIS,IBL	P-VIVA	S	III	
CO1,CO2	Explain therapeutic properties, dosage, Anupana, Pathyapathya, duration of treatment, Sevana Kala, shelf life, important Yogas of each Bhasma.	CC	MK	KH	L&PPT,TPW	T- EW,P-VIVA	F&S	III	
CO1,CO2	Describe Apakwa Ashuddha Avidhi Bhasma Sevanajanya Vyadhi and their Shanti-upaya.	CK	DK	KH	DIS,BS	P-VIVA,TT-Theory	F	III	
CO1,CO2	Describe in detail Amayika Prayoga (Therapeutic uses) of each Bhasma/Pishti with given references.	CAP	MK	SH	L&GD,W	T- EW,P-VIVA	F&S	III	

CO2,CO6	Explain research updates and clinical evidences of Swarna Bhasma, Makshika Bhasma and Shankha Bhasma.	CE	DK	K	PrBL, SDL	PRN	F&S	III	
Topic 4 4.Aushadhi Kalpa -I (Compound formulations) (Lecture :16 hours, Non lecture: 4 hours)									
CO1,CO2	Describe reference, ingredients, therapeutic properties, dosage and all administration details alongwith Anupana of each formulation.	CK	MK	KH	L&PPT,BS, SDL	T- EW,P-VIVA	F&S	III	
CO1,CO2	Explain Pathya Apathya, Sevana Avadhi (duration of treatment) and shelf-life of each formulation.	CC	MK	KH	L&PPT,DIS,BS	T- EW	F&S	III	
CO1,CO2	Interpret probable mode of action of each formulation as per Ayurveda.	CC	DK	KH	L&GD,BS	T- EW,P-VIVA	F&S	III	
CO2,CO3,CO6	Explain research updates and clinical evidences of Arogyavardhini Gutika and Gandhaka Rasayana	CE	DK	K	PrBL	P-VIVA	F&S	III	

CO3,CO4	Critically analyse compound drugs for their therapeutic actions mentiond in the classics.	AFT-VAL	DK	KH	IBL	PRN	F	III	
Topic 5 5.Aushadhi Kalpa-II (Compound Drugs/Formulations) (Lecture :14 hours, Non lecture: 2 hours)									
CO1,CO2,CO3,CO4	Describe Ingredients, therapeutic importance, dose, anupana, pathya-pathya, duration of treatment, sevana kala, shelf life, research updates and clinical evidences of Dashamoola Kwatha, Pushyanuga Churna, Sanjivani Vati, Chitrakadi Gutika, Simhanada Guggulu, Yogaraja Guggulu, Chyavanaprashavaleha, Gandhakadya Malahara, Ashokarishta, Kutajarishta, Panchagavya Ghrita, Bilvadi Gutika.	CAP	MK	KH	L&PPT	T- EW,P-VIVA	F&S	III	
CO1,CO2,CO3,CO4	Describe Ingredients, indications, dose, anupana, pathyapathya, duration of treatment, sevana kala, shelf life, and clinical evidences of Mahamanjistadi kwatha, Sudarshana Churna, Vyoshadi Vati, Bala Chaturbhadra Rasa, Lavana Bhaskara Churna, Narayana Taila,, Neeliringadi Taila Aravindasava, Kumaryasava.	CAP	NK	KH	L&PPT,DIS	P-VIVA	S	III	
CO1,CO2,CO4,CO5	Describe Ingredients, indications, dose, anupana, pathyapathya, duration of treatment, sevana kala, shelf life, and clinical evidences of Panchaguna Taila, Dadimavaleha, Bramhi Ghrita	CK	DK	K	L&PPT	P-VIVA,TT-Theory	S	III	
CO1,CO2,CO3	Undersand & Recite following classical kalpas.Describe Amayika prayoga of each formulation.Understand probable mode of action as per AyurvedaSearch and Record relevant reaserch articles.Create charts describing details of these drugs.Review market avaibality & poplularities of these drugs among practicing vaidyas & near by population.	CAP	MK	KH	L&PPT,DIS,BS,IBL,PBL	P-EXAM,COM,TT-Theory	F&S	III	V-KC,V-SH,V-PC,V-SHL,V-SP,V-BL

CO3,CO4	Explain ethical aspect of administration of compound drugs mainly regarding duration of the treatment given.	AFT-VAL	DK	K	PBL	CL-PR	F	III	
CO1,CO2,CO4,CO6	Describe ingredients, with its dose, therapeutic importance, anupana and pathya-apathya along with its clinical evidences and Research upadates	CK	MK	KH	L&PPT	T- EW,P-VIVA	F&S	III	
CO1,CO2,CO4,CO6	Enlist the formulations with its dose, anupana and indications	CK	NK	K	L	T-EMI	S	III	
Topic 6 6.Dosage Forms & Cosmetic Products (Lecture :5 hours, Non lecture: 2 hours)									
CO2,CO3,CO7	Define the term- Dosage forms.	CK	MK	K	L&PPT	TT-Theory	F&S	III	
CO2,CO3,CO7	Discuss the need of different dosage forms.	CK	MK	K	L&PPT	TT-Theory	F&S	III	
CO2,CO3,CO7	Explain the classification of different dosage forms.	CK	DK	K	L&PPT	TT-Theory	F&S	III	
CO2,CO3,CO7	Enlist the solid / liquid / semisolid dosage forms.	CK	MK	K	L&PPT	T-EMI	F&S	III	
CO2,CO3,CO7	Discuss the routes of administration of different dosage forms.	CK	MK	K	L&PPT	T- EW	F&S	III	
CO2,CO3,CO7	Describe the advantages and disadvantages of currently available dosage forms.	CK	MK	K	L&PPT	TT-Theory	F&S	III	
CO2,CO3,CO7	Discuss the research updates about modification of classical Ayurvedic dosage forms.	CK	DK	K	L&PPT	CL-PR	F	III	
CO2,CO3,CO7	Discuss the relevant case studies of different dosage forms.	CK	NK	K	L&PPT	P-SUR	F	III	

CO2,CO3,CO7	Define the term Cosmetics.	CK	DK	K	L	TT-Theory	F&S	III	
CO2,CO3,CO7	Explain the classification of cosmetics based on their application on the specific body parts.	CK	DK	K	L&PPT	CL-PR	F&S	III	
CO2,CO3,CO7	Differentiate between the ancient cosmetics and modern day cosmetics.	CK	DK	K	L&PPT	TT-Theory	F&S	II	
CO5	compare and appraise herbal cosmetics vs synthetic products	AFT-VAL	DK	KH	PBL	PRN	F	III	
Topic 7 7.Nutraceuticals (Lecture :6 hours, Non lecture: 1 hours)									
CO1	Describe importance of combination of aahara and aushadha	CK	MK	K	L&PPT	T- EW	F&S	III	H-SW
CO2,CO6	Explain Nutraceuticals with its types	CK	MK	K	L&PPT	TT-Theory	F&S	III	H-SW
CO2,CO6	Corelate rasayana and nutrceutical with examples	CAN	DK	KH	DIS,PrBL	T-OBT	F	III	H-SW
CO2	Describe with examples mode of action of Ayurvedic nutraceuticals	CAP	MK	KH	SDL, LS	PRN	F	III	H-Samhita, H-SW
CO2,CO6,CO7	Enlist at least two dietery preparations from Ayurvedic classics which can serve as rasayana/ nutraceutical in-1) General Health2) Pediatric Health3) Geriatric Health4) Women(Garbhini/ Sutika) Health5) Cardio-protection6) Chronic illness-recovery stage	CAP	MK	K	DIS,BS,SY	CL-PR	F	III	H-SW
CO1,CO2,CO6,CO7	Describe potential of Ayurvedic diet and Rasayana in sports endeavor	CAP	DK	KH	BS,PrBL,PS	DEB	F	III	H-SW

					M				
CO7	Explain research updates about nutraceuticals	CK	NK	K	SDL, PL	M-POS	F	III	
CO2	Enlist atleast two examples of Aushadhi siddha aahara with its indications for each category-->(Aharadravya belonging to following category and kalpa prepared from that aahara dravya and other aushadhi ingredients)1) Jala varga2) Dugdha varga3) Ikshu varga4) Suka-dhanya varga5) Shimbi Dhanya Varga6) Shaka Varga7) Phala Varga8) Lavana Varga9) Spices	CC	DK	K	L&GD,PrBL	CL-PR	F	III	H-Samhita, H-SW
CO3,CO4	creat list of unique features of Ayurvedic neutraceuticals and appraise their current need	AFT-VAL	DK	KH	DIS	PRN	F	III	
Topic 8 8.Anupana Prayoga for Aushadhi Kalpa (Lecture :4 hours, Non lecture: 1 hours)									
CO1	Define and classify Anupana and Sahapana	CK	MK	K	L	T- EW	F&S	III	
CO1,CO2	Expalin different factors to be considered for selection of Anupana as per Disease and Patients	CC	MK	KH	L	T- EW	F&S	III	
CO1,CO2	Enlist different anupana for a single drug based on the condtion of patient and disease. Elaborate with the help of examples of kalpas.	CC	MK	KH	L	T- EW	S	III	
CO4	Describe value of proper selection of Anupanas with examples	AFT-VAL	DK	K	SDL	M-CHT	F	III	
Topic 9 9.Aushadhi Prayoga Marga (Lecture :5 hours, Non lecture: 1 hours)									
CO2,CO4	Discuss the various types of Aushadhi Prayog Marga (route of drug administration).	CK	MK	K	L&PPT	T- EW	F&S	II	
CO2,CO4	Describe the advantages and disadvantages of each Aushadhi Prayog Marga.	CK	DK	K	L&PPT,BS	P-SUR,PM,TT-Theory	F&S	II	

CO2,CO4	Enlist the dosage forms used in the specific Aushadhi Prayog Marga.	CK	DK	K	L&PPT	T-EMI	F&S	II	
CO2	Discuss the nature of drug (s) administered in various routes of drug administration.	CAP	NK	KH	L&GD	CL-PR	F	II	
CO4,CO5	Appraise administration of drugs through various routes mentioned in Ayurvedic treatment	AFT-VAL	MK	K	L&GD	T- EW	F&S	III	
Topic 10 10.Rational prescription along with safe dispensing of Ayurvedic formulations. (Lecture :1 hours, Non lecture: 4 hours)									
CO2,CO4	Describe and write demo ideal prescription.	CAP	MK	SH	L&GD,CBL	CR-W,CHK	F&S	III	V-KC,V-SP,V-BL
CO1,CO3,CO4	Explain the safe dispensing and efficacious use of Ayurvedic drugs.	CAP	MK	KH	L&GD,BS,TPW	T-CS,PM	F&S	III	V-KC,V-BL
CO2,CO4	Explain the importance of rational prescribing of drugs and the concept of essential drugs.	CK	DK	K	L&GD,IBL	QZ ,CHK	F	III	V-KC
CO2,CO4,CO5	Describe the standard protocol for safe dispensing of Ayurvedic drugs.	CK	DK	KH	L&GD	T-OBT	F	III	
CO2,CO4	Demonstrate and educate home remedies to small group of population.	CAP	DK	SH	PrBL,TPW	TR	F	III	H-SW
CO5	explain ethical aspects related to prescription writting	AFT-RES	MK	KH	TPW	INT	F	III	
Topic 11 11.Traditional & Local health Practices (Lecture :2 hours, Non lecture: 4 hours)									
CO1	Identify Local Health Traditions and Healing Knowledge,	CC	DK	K	DIS,PrBL	P-SUR,INT	F	III	

CO1,CO5	Recognise the possible potential of product development and research based on Traditional knowledge	CK	DK	KH	IBL	INT	F	III	
CO1,CO4	Identify the factors responsible for grant of patent and erroneus grant of patent on indian traditional knowledge.?	CK	DK	K	BS	INT	F&S	III	
CO5	Appraise traditional knowlege of Ayurvedic medicines	AFT-VAL	DK	K	TPW	CR-W	F	III	
Topic 12 12.Pharmacovigilance for Ayurveda drugs (Lecture :1 hours, Non lecture: 4 hours)									
CO2,CO4,CO5	Describe the term Pharmacovigilance and explain importance of Pharmacovigilance for Ayurvedic drugs.	CK	DK	K	L&PPT,IBL	M-POS,C-INT,RK	F	III	V-KC,V-BL,H-DG,H-AT
CO4,CO5	Explain the status and central sector scheme of Pharmacovigilance for Ayurveda, Siddha, Unani, and Homeopathy (ASU & H) drugs.	CK	MK	K	L&PPT,DIS	INT,TT-Theory	F	III	V-KC,H-DG,H-AT
CO4,CO5	Define Adverse Drug Reactions (ADR) and its types.	CE	DK	K	L&GD,IBL	QZ ,TT-Theory,VV-Viva	S	III	V-KC,V-BL,H-DG,H-AT
CO2,CO4,CO5	Identify and monitor ADRs.	AFT-VAL	DK	KH	L&GD,BS,IBL	PRN,RK	F	III	V-KC,V-BL,H-DG,H-AT

CO2,CO4	Discuss and make critical comments on the safe and efficacious use of Ayurvedic drugs.	CAP	DK	KH	L&GD,PrBL,TUT	QZ ,CL-PR,INT	F	III	V-KC ,H-DG,H-AT
CO4,CO5	Debate on ADR of ASU drugs	AFT-RES	DK	K	DIS	DEB	F	III	

List of Practicals (Term and Hours)

PRACTICALS (Marks-100)			
S.No	**List of Topics**	**Term**	**Hours**
1	1.Paribhasha concept based Practicals	1	20
2	2.Panchavidha Kashaya Kalpana & their Upakalpana Practicals	1	24
3	3.Rasa Dravya Aushadhi Nirmana Practicals	1	20
4	4.Bheshaja Kalpana Practicals -I	2	24
5	5.Bheshaja Kalpana Practicals -II	2	22
6	6.Dosage Forms & Self-care Products Practicals	2	22
7	7.Field Visit/ Study Tour	3	24
8	8.Hospital IPD Practical	3	10
9	9. Drug Dispensing Practical	3	6
10	10.Quality Control Practicals	2	38

Table 4: Learning objectives (Practical)

A4 Course outcome	B4 Learning Objective (At the end of the session, the students should be able to)	C4 Domain/sub	D4 Must to know / desirable to know / Nice to know	E4 Level Does/ Shows how/ Knows how/ Know	F4 T-L method	G4 Assessment (Refer abbreviations)	H4 Formative/ summative	I4 Term	K4 Integration
Topic 1 1.Paribhasha concept based Practicals									
CO1	Identify the drugs and recite classical name,English name and chemical composition and varga(class) Recite Maharasa , uparasa, Sadharana rasa shlokas from Rasaratna samuchchaya.	PSY-SET	MK	KH	GBL, REC	P-VIVA,P-ID	F&S	I	
CO1,CO2	Demonstrate the correct procedure / SOP and assess the changes observed after the procedure.Discuss the relevant samskara and its role in that procedure.Interpret the Physical, Chemical and Biological alterations.	PSY-MEC	MK	D	GBL, PT	P-PRF,CHK,OSPE	S	I	
CO1,CO2	Observe and describe the pharmaceutical preparation of Gandhaka druti. Explain the term alotropism.Recite melting, boiling and evaporating temparature of Gandhaka.	PSY-MEC	DK	KH	DIS,D_L	P-VIVA	S	II	
CO1,CO2	Observe the procedure of Vanga Jarana. Explain the difference between Jarana and Jaranaa. Discuss chemical process of oxidation and reduction. Recall the information about melting points of all the metals.	CAP	DK	KH	PT,D	P-VIVA	S	III	
CO1,CO2	Demonstrate preparation of Kajjali. Recite its classical shloka. Prepare a checklist of parameters for its siddhilakshana. Interpret	PSY-MEC	MK	D	PBL, TPW,	P-REC,P-EXAM,P-PS	F&S	I	

	law of definite proportion to explain and calculate amount of free sulfur in the prepared amount of kajjali. Calculate the expected weight of rasasindura from the given amount of kajjali.				D_L				
CO1,CO2	Identify relevent Bhasmapariksha and demostrate samanya and vishesha Bhasma pariksha. Interpret physical/ chemical laws relevant to classical bhasma pariksha.	PSY-MEC	MK	D	DIS,GBL,LRI,DA,D_L	P-VIVA,CHK	F&S	I	
CO1	Identify various weights and recite essential measures from conversion chart of AFI. Recognise weighing machines and their weighing capacity.	CAP	DK	KH	BS,PrBL,TPW,PL	PRN,P-SUR	F	I	
CO3,CO4	Identify and value SOP of each procedure of the practical conduceted.	AFT-VAL	MK	KH	D_L	P-EXAM	S	II	
CO2	Appraise ancient indications mentioned in classics for confirmation of end point of the pharmaceutical process(Siddhi lakshana)	AFT-RES	MK	K	PrBL	P-VIVA	S	III	
Topic 2 2.Panchavidha Kashaya Kalpana & their Upakalpana Practicals									
CO1,CO2	Recall, Identify and authenticate the raw materials required as per the dosge form/ formulations	PSY-SET	MK	KH	DIS,D	P-VIVA	F&S	II	
CO1,CO2	Demonstrate the method of preparation to get the desired dosage form following SOP	PSY-MEC	MK	SH	DIS,PT	P-VIVA,P-EXAM	F&S	II	
CO1,CO2,CO5	Assess and explain different parameters to achieve desired characters/ end points (siddhi lakshana) as per classical and contemporary parameters	PSY-MEC	MK	KH	DIS,D	P-VIVA,P-EXAM	F&S	II	
CO1,CO2	Describe ethical responsibility expected during Pharmaceutical	AFT-	MK	K	SDL	P-PRF	F&S	III	

	preparation of Ayurvedic Formulations	REC							
Topic 3 3.Rasa Dravya Aushadhi Nirmana Practicals									
CO1,CO2,CO3	Explain reference Shloka of kalpas & write with interpretation -list of ingredients, their proportion, principles of yoga - yoga samyojana dravya	CC	MK	KH	L	P-VIVA,P-EXAM	F&S	I	
CO1,CO2,CO3	Identify raw Dravya ,used part with classical Mana and interpret in metric system....	CAP	MK	D	DIS,BS	P-EXAM	F&S	I	
CO2,CO3	Identify, Utilize & know mechanism of Yantra used for drug preparation	CAP	MK	KH	DIS,BS	VV-Viva	F&S	I	
CO2,CO3	Observe & Record various parameters responsible for good manufacturing which are done during process of phamaceutical preparation	CE	MK	SH	DIS,BS,PT	P-EXAM	F	I	
CO2	Demonstrate Sidhdhi Lakshna	CAP	MK	SH	D	P-VIVA	S	III	
CO2,CO3	Assess finished product as per classics.	CE	MK	SH	DIS,PT	P-VIVA,P-EXAM	S	I	
CO1,CO2,CO	Appraise peculiarities of chaturvidha rasayana preparation	AFT-	DK	KH	PER	M-POS	F	III	

4		VAL							
Topic 4 4.Bheshaja Kalpana Practicals -I									
CO1,CO3	Demonstrate Arka preparation method, along with its packaging technique and therapeutic importance.	PSY-SET	MK	SH	DIS,D-M	P-VIVA,P-EXAM	F&S	II	
CO1,CO3	Demonstrate prepration of Vati along with drying techniques	PSY-MEC	MK	KH	DIS,D	P-VIVA,P-EXAM	F&S	II	
CO1,CO3	Identify the genuine sample of Guggulu and demonstrate preparation of different types of Guggulu along with drying techniques	PSY-SET	MK	K	DIS,PT	P-VIVA,P-EXAM	F&S	II	
CO1,CO3	Identify the useful part of the raw material and demonstrate Sattva preparation method.	PSY-SET	MK	K	DIS,D	P-VIVA,P-EXAM	F	II	
CO1,CO3	Demonstrate prepration of Varti along with drying and packaging techniques.	PSY-SET	MK	KH	PT	P-VIVA,P-EXAM	F	II	
CO1,CO3	Demonstrate Lavana preparation methods, along with its packaging techniques.	PSY-SET	DK	SH	PT	P-VIVA,P-EXAM	F	II	
CO1,CO3	Identify the internal and external applications of different kshara kalpana along with importance of ksharasutra through surgical aspects.	PSY-ADT	MK	K	PT	P-VIVA,P-EXAM	F	II	V-SHL
CO1,CO3	Demonstrate and Explain preparation methods of Masi kalpana for its internal or external application in clinical practice.	PSY-ADT	DK	K	DIS,PT	P-VIVA,P-EXAM	F	II	
CO1,CO3	Demonstrate preparation and application aspects of Upanaha kalpana .	PSY-MEC	DK	K	DIS,PT	P-EXAM	F&S	II	V-KC
CO1,CO3	Demonstrate preparations of Sikta taila along with identify the genuine sample of Sikta.Perform and Describe Malahara kalpana preparation method with its confirmatory tests of end point. .	PSY-SET	DK	K	DIS,PT	P-VIVA,P-EXAM	F&S	II	

CO2,CO3	Demonstrate preparation of different types of Malahara with its applied aspect.	PSY-SET	NK	K	PT	P-SUR	F	II	V-KC
CO2,CO3	Demonstrate preparation of different types of Lepa and preparation of Shatadhouta ghrita .	PSY-SET	NK	KH	DIS,PT	PRN	F	II	V-KC ,V-PC
CO2,CO3	Perform and Describe Lepa kalpana preparation method with its confirmatory tests and precautionsExplain therapeutic importance of prepared Lepa kalpana, integration with Kayachikitsa and Panchakarma department along with its shelf life and packaging techniques.	PSY-MEC	DK	SH	L&GD	P-VIVA,P-EXAM	F&S	II	V-KC
CO2,CO3	Observe demonstration of formulation of Danta manjana	CAP	NK	KH	L&GD	PRN	F	II	
Topic 5 5.Bheshaja Kalpana Practicals -II									
CO1,CO2	Demonstrae the SoP involved in the drug selection, measuring the appropriate quantity of ingredients, preparation, observe the Physical Changes, Siddhi lakshana, enlisting the results, packing and storage of Ghrita Murchana and Taila Murchana	PSY-MEC	MK	D	PT,D	P-REC,P-EXAM,OSPE	F&S	II	
CO1,CO2	Demonstrae the SoP involved in the drug selection, measuring the appropriate quantity of ingredients, preparation, observe the Physical Changes, Siddhi lakshana, enlisting the results, packing and storage of Jatyadi Gritha/ Triphala Gritha/ Ksheera Shatphala Gritha/Phala Gritha,	PSY-MEC	MK	D	PT,D	P-EXAM,OSPE	F&S	II	
CO1,CO2	Demonstrae the SoP involved in the drug selection, measuring the appropriate quantity of ingredients, preparation, observe the Physical Changes, Siddhi lakshana, enlisting the results, packing and storage Ksheera Bala Taila/Kasisadi Taila/ Panchaguna Taila/ Arka Taila/Kutajasuryapaki taila	PSY-MEC	MK	SH	D	P-EXAM,OSPE	F&S	II	

CO1,CO2	Demonstrae the SoP involved in the drug selection, measuring the appropriate quantity of ingredients, preparation, observe the Physical Changes, Siddhi lakshana, enlisting the results, packing and storage Bhallataka Taila Patana/ Jayapala Taila Patana/Vishvamitra Kalpa Sneha	PSY-MEC	DK	KH	D	P-VIVA,P-EXAM,OSPE	F	II	
CO2	Demonstrae the SoP involved in the drug selection, measuring the appropriate quantity of ingredients, preparation, observe the Physical Changes, Siddhi lakshana, enlisting the results, packing and storage of Vasavaleha/ Chavana Prasha Avaleha/ Kushmanda Avaleha	PSY-MEC	MK	KH	D	P-VIVA,P-REC,P-EXAM	F&S	II	
CO2	Demonstrae the SoP involved in the drug selection, measuring the appropriate quantity of ingredients, preparation, observe the Physical Changes, Siddhi lakshana, enlisting the results, packing and storage of Nimbu Sharkara	PSY-MEC	NK	SH	D	P-EXAM,OSPE	F	II	
CO2	Demonstrae the SoP involved in the drug selection, measuring the appropriate quantity of ingredients, preparation, observe the Physical Changes, Siddhi lakshana, enlisting the results, packing and storage of Daruharidra Rasakriya	PSY-MEC	NK	SH	D	PRN	F	II	
CO2	Demonstrae the SoP involved in the drug selection, measuring the appropriate quantity of ingredients, preparation, observe the Physical Changes, Siddhi lakshana, enlisting the results, packing and storage of Haridra Khanda/ Narikela Khanada	PSY-MEC	MK	D	D	P-VIVA,P-EXAM,OSPE	F&S	II	
CO1	Demonstrae the SoP involved in the drug selection, measuring the appropriate quantity of ingredients, preparation, observe the	PSY-MEC	MK	KH	D	T- EW,P-VIVA	F&S	II	

	Physical Changes, Siddhi lakshana, enlisting the results, packing and storage of Kumaryasava/Drakshasava								
CO1,CO2	Demonstrae the SoP involved in the drug selection, measuring the appropriate quantity of ingredients, preparation, observe the Physical Changes, Siddhi lakshana, enlisting the results, packing and storage of Kutajarista/Ashokarishta/Takrarishta	PSY-MEC	MK	KH	D	P-VIVA	F&S	II	
CO2	. Demonstrate the SoP involved in the drug selection, measuring the appropriate quantity of ingredients, preparation, observe the Physical Changes, Siddhi lakshana, enlist the results, packing techniques and storage of unique formulations for e.g.Kanji/ Madushukta	CC	DK	KH	D	P-VIVA,COM	F&S	II	
Topic 6 6.Dosage Forms & Self-care Products Practicals									
CO1,CO2,CO6	Observe instruments used to prepare soliddosage form, liquid dosage form and Semisolid Dosage Form with one example for each , their method of preparation, ingredients used with their quantity and Quality control Parameters.	AFT-RES	DK	KH	W,PT,D	P-VIVA,CHK	F&S	III	
CO1,CO2,CO6	Observe instruments used to prepare with one example for each , their method of preparation, ingredients used with their quantityand Quality control Parameters.of following self care productsHair care: Shampoo Body care :Soap, Perfume Face care : Face Pack/Talcum Powder Lip Care : Lip Balm, Lipstick Oral care: Tooth Paste/ Mouth Wash Foot Care: Foot Cream Hand Disinfectant : Hand SanitizerSkin Care: Moisturizer, Sunscreen Lotion following self care products	PSY-ADT	DK	KH	L_VC,PT,D	P-VIVA,P-EXAM,CHK	F&S	III	
Topic 7 7.Field Visit/ Study Tour									
CO1,CO3,CO4,CO5,CO6	Field Visit - Record the storage condition of the raw / in-process	CK	DK	K	DIS,FV	M-POS,COM	F	III	

	/ finished goods prepared in the approved sections.								
CO1,CO3,CO4,CO5,CO6	Determine the role of various Yantras / machineries used in the approved sections of the Pharmacy	CK	DK	KH	DIS,RLE	INT	F	III	
CO1,CO3,CO4,CO5,CO6	Differentiate between the ancient and contemporary methods of drug preparation.	CC	DK	K	DIS,FV	PRN	F	III	
CO1,CO3,CO4,CO5,CO6	Enlist the documents required in Batch Manufacturing of Ayurvedic medicines.	CK	NK	K	DIS	P-SUR	F	III	
CO1,CO3,CO4,CO5,CO6	Identify the role of Quality Control instruments and equipments in ensuring a quality Ayurvedic product.	CK	DK	K	L&PPT,DIS	DEB	F	III	
CO1,CO3,CO4,CO5,CO6	Appreciate the importance of Good Manufacturing Practices and Good Packaging Practices required in Ayurvedic Drug manufacturing.	AFT-VAL	DK	K	DIS	PRN,DEB	F	III	
CO1,CO3,CO4,CO5,CO6	Prepare own products as per prevalent FDA guidelines.	PSY-GUD	DK	D	L_VC,DIS	P-EXAM	F	III	
Topic 8 8.Hospital IPD Practical									
CO1,CO2,CO3,CO4	Review & Observe the case Sheets.	CC	NK	KH	DIS	P-SUR	F	III	V-KC,V-SH,V-PC,V-SHL,V-S

									P,V-BL
CO1,CO2	Discuss for formulation prescription manner.	CC	DK	KH	L&GD	T-CS	F&S	III	V-KC
CO1,CO2,CO3	Demonstrate & Explain prescription method.	CAP	DK	SH	CD	P-PS	F&S	III	V-KC
CO1,CO2,CO4	Measure dose of prescribed drug.	CAP	MK	KH	PrBL	SP	F	III	
CO1,CO2,CO3	Enlist Time, Duration, Pathya, Apathya while prescribing drugs.	CAP	DK	KH	L&GD	P-PRF	F	III	
CO4,CO5	value details and methodical writting of case records of hospital IPD patients	AFT-VAL	MK	KH	RLE	P-CASE	F	III	
Topic 9 9. Drug Dispensing Practical									
CO1,CO3	Assess the arrangement of Ayurvedic drugs according to nature and type in dispensing room or pharmacy.	CAP	NK	D	RLE	P-PRF	F	III	V-KC,V-PC,V-BL
CO1,CO3,CO4	Assess practice of prescription processing and labelling of the drugs.	CE	DK	KH	PrBL	INT	F	III	
CO3,CO4	Determine and identify the cause of common errors occurred	CC	DK	KH	RLE	CL-PR	F	III	

	during dispensing of Ayurvedic drugs.								
CO2,CO4	Explain use of correct drug supply to the right patients, in the required dosage, quantities and clear drug information.	CAP	DK	SH	L&G D	PRN	F	III	V-KC ,V-BL
Topic 10 10.Quality Control Practicals									
CO2	Develop analytical skills for understanding Identity, Purity and Strength of raw materials and finished products as per the standard guideines of the Ayurvedic Pharmacopoeia of India.	CK	MK	KH	L&G D,BS, W,PT, D_L	P-VIVA	F	II	
CO2,CO5	Identify the geological description of minerals: physical parameters.	CK	DK	K	L_VC ,W,D _L,FV	P-ID	F&S	II	
CO2	Describe ayurvedic perspectives of quality control parameters applying for solid, semisolid and liquid dosage forms.	CAP	MK	SH	L&G D,TU T,DA	P-VIVA,Log book	F&S	II	
CO2,CO5	Demonstrate the calibration techniques used for Weighing Balance (chemical and physical), pH Meter, Hot Air Oven and Electric Muffle Furnace to ensure the accuracy of the instrument what it is intended to measure.	CC	DK	KH	D_L	P-VIVA,PRN	F	II	
CO2		CAP	MK	SH	PT,D	P-EXAM,Log	F	II	

	Demonstrate bulk density, loss on drying, total ash, pH and water soluble extractives of Churna.				A	book			
CO2	Perform the analytical tests of tablets/ vati/ gutika for hardness, uniformity of weight and friability.	AFT-CHR	MK	SH	PT,DA	P-EXAM,Log book	F&S	II	
CO2	Estimate specific gravity, alcohol content and total solids of Asava & Arishta.	AFT-CHR	MK	SH	PT	P-EXAM,P-PRF	F	II	
CO2,CO5	Determine iodine value, acid value and saponification value of oils / ghee.	CAP	MK	KH	D_L	P-VIVA	F&S	II	
CO2,CO3	Calculate the dose of various dosage forms and their dispensing methods.	CE	MK	SH	L&GD,PrBL,BL,RLE,D_L	P-SUR,P-CASE	F&S	II	
CO4,CO5	Appraise quality control procedures done for Ayurvedic formulations	AFT-VAL	DK	K	DIS	CL-PR	F	III	

Table 4a: List of Practical

S.No	Name of practical	Term	Activity	Practical hrs
1	1.Paribhasha concept basedPracticals	1	**A) Dravya Paribhasha-** Identification of drugs and their respective class (varga) **B) Prakriya Paribhasha-** **1.Swedana:** Godanti Shodhana (A.F.I.-1,18:4 (Rasatarangini 11/238) Shankha Shodhana (A.F.I.-1,18:18(Rasatarangini 12/12/2) Kapardika shodhana (Rasatarangini 12/89) Guggulu Shodhana (Rasendra Sara Sangraha 1/386, Pg. 117 **2. Mardana**:Parada Samanya Shodhana (Ayurveda Prakasha 1/165) **3. Dhalana :** Gandhaka Shodhana (A.F.I. 2 Parishishta - 2,9 Shodhana(Rasamrita 2, 3) Vanga Shodhana (A.F.I.-1,18:15 (Sharangadhara M.11/2) Yashada shodhana (Rasatarangini 19/99) **4. Nirvapa**: Abhraka Shodhana (A.F.I.-1,18:1 (Rasatarangini 10/20) Tamra Shodhana (A.F.I.-1,18:5 (Ayurveda Prakasha 3/118) **5. Nirjaleekarana :** Tankana Shodhana (A.F.I. 2 Parishishta -2,15 Shodhana (Ayurveda Prakasha 2/244) Kankshi shodhana (A.F.I.-2, 14:3 (Ayurveda Prakasha 2 /258) **6. Bhavana:** Hingula Shodhana (A.F.I. 2 Parishishta - 2 Shodhana (Rasamruta 1/54) **7. Bharjana:** Gairika Shodhana (A.F.I. 2 Parishishta - 2,11 Shodhana (Rasaratna Samuchchaya 3/49) Hingu Shodhana (Bhavprakash Nighantu, Haritakyadi Varga, 1/101, Pg. 42) **8. Nimajjana/Sthapana:** Vatsanabha shodhana (A.F.I. 2 Parishishta - 2,25 Shodhana (Rasamrita parishishta 8:145) 9. Jarana : Vanga Jaran (Ayurved Prakash 3/159) Vanga Bhasma (A.F.I.-1,18:15 (Rasamruta 3/94) **10. Murchana:** Mugdha Rasa (Rasatarangini 6/9) Kajjali (A.F.I.- 1 Parishishta-1, Paribhasha 21 (Rasatarangini 2/27) **11. Druti-** Gandhaka Druti(Rasa Ratna Samuchchaya 3/29) **C) Pramanikarana Paribhasha-**	20

			1) Bhasma Samanya Pareeksha **-** Abhraka Bhasma (Ayurved Prakash 2/104) Shankha Bhasma (Rasaratnasamucchaya 8/26-30) **2) Bhasma Vishesha Pareeksha:** Tamra Bhasma (Dadhi/ Nimbu Pariksha)-(Bhaishajya Kalpana Vigyan, Vd. Siddhinandan Mishra, Pg. 78) **D) Namburi Phased Spot Test (NPST)**	
2	2.Panchavidha Kashaya Kalpana & their Upakalpana Practicals	1	**1.Swarasa Kalpana:**Tulasi swarasa (Sharangdhar Samhita Madhyam Khanda 1/2),Ardraka Swarasa (Sharangdhar Samhita Madhyam Khanda 1/2), Vasaputapaka Swarasa (Sharangdhar Samhita Madhyam Khanda 1/22-23 & 34) **2. Kalka Kalpana:** Nimba kalka (Sharangdhar Samhita Madhyam Khanda 5/1),Rasona Kalka (Sharangdhar Samhita Madhyam Khanda 5/1) **3. Kwatha Kalpana:** Punarnavashtaka kwatha (Sharangdhar Samhita Madhyam Khanda 2/1-2, 78-79), Rasna Saptaka Kwatha (Sharangdhar Samhita Madhyam Khanda 2/1-2, 88-89) **4. Hima Kalpana:**Dhanyaka Hima (Sharangdhar Samhita Madhyam Khanda 4/1, 7-8),Sarivadi Hima **5. Phanta Kalpana:**Panchakola phanta (Sharangdhar Samhita Madhyam Khanda 3/1-2),Yashtimadhu phanta (AFI 1 Parishishta – 1,2/5 Paribhasha) **6. Churna Kalpana:**Sitopaladi churna (AFI Part 1, Vol. 1 A, Pg. 348), Hingwastaka Churna (AFI Part 1, Vol. 1 A, Pg. 353) **7. Pramathya:**Mustadi Pramathya (Sharangdhar Samhita Madhyam Khanda 2/ 152-153) **8. Paneeya Kalpana:** Shadanga Paneeya (Sharangdhar Samhita Madhyam Khanda 2/ 159-160) **9. Mantha Kalpana:** Kharjuradi Mantha (Sharangdhar Samhita Madhyam Khanda 3/9-10) **10. Panaka Kalpana:** Chincha Panaka (Bhaishajya Ratnavali Arochaka 18/34-35), Chandana Panaka **11. Ksheerapaka Kalpana**: (Sharangdhar	24

			Samhita Madhyam Khanda 2/175-176), Arjuna Ksheera Paka - Chakradatta, Lashuna Ksheerapaka - Charaka Chikitsasthana 5/95 **12. Udaka Kalpana :** Tandulodaka (Sharangdhar Samhita Madhyam Khanda 1/28) Note: In each category if more than 1 practical are there any one or all may be performed.	
3	3.Rasa Dravya Aushadhi Nirmana Practicals	1	**1. Marana :**Vanga Bhasma (A.F.I. - I, Bhasma, 18:15, Rasatarangini Taranga) / Sankha Bhasma:A.F.I. - I, Bhasma, 18:18, Rasatarangini taranga 12/2) **2. Kharaliyarasayana :**Ananda Bhairava Rasa(A.F.I. - I, Rasayoga, 20:3, Rasendrasarasangraha Jwaradhikara 2/103-105) /, Tribhuvana Keerti rasa(A.F.I. - I, Rasayoga, 20:20, rasamrita 9/80-81) **3. Parpati :** Rasa Parpati(A.F.I. - I, Parpati, 16:3, Bhaishajyaratnavali grahanirogadhikara 414-416&436-440), Sweta Parpati(A.F.I. - II, Parpati, 12:2, siddhyogsangraha ashmarimutrakruchhaadhikara) **4. Kupipakwarasayana :** Rasasindhura(A.F.I. - I, Kupipakwa Rasayana, 15:6, rasatarangini taranga 6/162-176) **5.Pottalirasayana :**Rasagarbhapottali (Rasayogsagar dwitiyabhaga pottali rahasya page 582) **6. Rasa :** Laghusutsekhararasa (Rasatantrasara avum siddhaprayogsangraha part-1, kharaliya rasayana page 274) **7. Loha:** Navayasa loha(A.F.I. - II, lauha, 17:2, Charaka samhita chi.16/70-71)/, Saptamrita loha(A.F.I. - I, lauha, 21:11, Bhaishajyaratnavali shoolrogadhikara 83-84)	20
4	4.Bheshaja Kalpana Practicals -I	2	**1. Arka Kalpana:** Yavani Arka (API, Part 2, Vol. 3, Pg. 24) Gulab Arka (API, Part 2, Vol. 3, Pg. 4) Misreya Arka (AFI, Part 1, Vol. 1 A, Pg. 106)	24

			2. Vati Kalpana: Agni Tundi Vati (AFI, Part 1, Vol. 1 A, Pg. 497) Chitrakadi Vati (API, Part 2, Vol. 3, Pg. 107) Lavangadi Vati (API, Part 2, Vol. 3, Pg. 116) **3. Guggulu Kalpana:** Triphala Guggulu (API, Part 2, Vol. 2, Pg. 134) Kaishor Guggulu (API, Part 2, Vol. 1, Pg. 94) **4. Satva Kalpana:** Amruta Satva (AFI, Part 1, Vol. 1 A, Pg. 560) Ardraka Satwa **5. Varti Kalpana:** Phala Varti - (Bhaishajya Ratnavali 31/10) Chandrodaya Varti (AFI, Part 1, Vol. 1 A, Pg. 553) **6. Lavana Kalpana:** Arka Lavana (API, Part 2, Vol. 1, Pg. 103) Narikela Lavana (AFI, Part 1, Vol. 1 A, Pg. 473) **7. Kshara Kalpana:** Apamarga Kshara (AFI, Part 1, Vol. 1 A, Pg. 466) Kshara Sutra Preparation (AFI Part 3, Pg 213) **8. Masi Kalpana:** Triphala Masi (Rasendra Sara Sangraha Upadamsha Chikitsa) Mayura Piccha Masi (Yogratnakar , Chhardiroga, Pg. 453) **9. Upanaha:** Atasi Upanaha **10. Manjana:** Dashanasamskara churna (Bhaishajya Ratnavali Mukharog, 61/97-98) **11. Malahara Kalpana**: Siktha Taila (Rasatarangini 4/59) Sarjarasa Malahara (Rasatantrasar & Siddha Prayog Sangrah Part 1, Pg. 849) Gandhaka Malahara (Rastarangini 8/63-85) **12.Lepa Kalpana:** Dashanga Lepa (AFI, Part 1, Vol. 1 A, Pg.	

			487) Shatadhouta Ghrita (Sushrut Samhita Uttartantra 39/283)	
5	5.BheshajaKalpana Practicals -II	2	**1. Sneha Kalpana:** Ghrita Murchana (Bhaishajya Ratnavali, Jwaradhikar, 1285), Taila Murchana (Bhaishajya Ratnavali, Jwaradhikar, 1286-1287) **2. Ghrita Kalpana:** Triphala Ghrita (API, Part 2, Vol. 1, Pg. 90), Amruta Ghrita (Bhaishajya Ratnavali Vatarakta 27/126) **3. Taila Kalpana**: Ksheera Bala Taila (API, Part 2, Vol. 1, Pg. 124), Arka Taila(Sharangdhar Samhita Madhyam Khanda 9/148) **4. Taila Patana:** Bhallataka Taila Patana (Sushrut Samhita Chikitasa Sthana 1/92) **5. Avaleha Kalpana**: Vasavaleha (API, Part 2, Vol. 1, Pg. 32), Kushmanda Avaleha (AFI, Part 1, Vol. 1 A, Pg. 35) **6. Sharkara Kalpana:** Nimbu Sharkara (Rasatantrasara & Siddhaprayog Sangraha I / Paka Avaleha) **7. Ghana**: Kutaja Ghana(AFI Part 2, Pg 175), Guduchi Ghana (Ayurved Prakash 3) **8. Khanda Kalpana**: Haridra Khanda (Bhaishajya Ratnavali Udarda, Shitapitta), Narikela Khanda (AFI, Part 1, Vol. 1 A, Pg. 41) **9. Asava :** Lohasava (Sharangdhar Samhita, Madhyam Khanda 10/ 34-38), Drakshasava (AFI Part 2, 1:1) **10. Arishta:** Arjunarishta (Bhaishajya Ratnavali Hridrog). Takrarishta (Charak Samhita Chikitsa 15 / 120) **11. Shukta Kalpana:** Kanji (Sharangdhar Samhita, Madhyam Khanda 10/ 12), Madushukta (Bhaishajya Ratnavali Karnaroga 62 /23-24)	22
6	6.Dosage Forms & Self-care Products Practicals	2	**1. Solid dosage forms:** • Granules/ Lozenges (Pharmaceutics by R.M. Mehta)	22

2. Liquid Dosage forms:

- Syrup/Suspension/Emulsion/Liniment (Pharmaceutics by R.M. Mehta)

3. Semisolid Dosage:

- Cream/Gel/Ointment/Pain Balm (Pharmaceutics by R.M. Mehta)

4. Hair Care:

- Shampoo (A Handbook of Cosmetics by B M Mithal & R N Saha 8th chapter)

5. Body Care:

- Soap/Perfume (Pharmaceutics by R.M. Mehta)

6. Face Care:

- Face pack / Talcum Powder (A Handbook of Cosmetics by B M Mithal & R N Saha 3rd chapter)

7. Lip Care:

- Lip Balm, Lipstick (A Handbook of Cosmetics by B M Mithal & R N Saha 4th chapter)

8. Oral Care:

- Tooth Paste/ Mouth Wash (A Handbook of Cosmetics by B M Mithal & R N Saha 19th & 20th chapter)

9. Foot Care:

			• Foot Cream (A Handbook of Cosmetics by B M Mithal & R N Saha 5th chapter) **10. Hand Disinfectant:** • Hand Sanitizer ((Pharmaceutics by R.M. Mehta) **11. Skin Care:** • Moisturizer/Sunscreen Lotion (A Handbook of Cosmetics by B M Mithal & R N Saha 6th chapter) **Note: In each category if more than 1 practical are there any one or all may be performed.**	
7	7.Field Visit/ Study Tour	3	GMP Certified Pharmacy Visit X 2 Pharmacy (1 classical formulations and 1 Proprietary formulations/Having both Manufacturing facility) NABL Accredited drug Testing Laboratory/Research and Development Unit Combined out campus/ Field visit may be planned wherever feasible	24
8	8.Hospital IPD Practical	3	Hospital IPD Practical: Formulation prescription, method administration, dose, time, duration, Pathya, Apathya advised - Minimum 10 case sheet record of different dosage forms prescribed for particular case/ disease	10
9	9. DrugDispensing Practical	3	Drug Dispensing practical for method of Dispensing different dosage forms, their packing for OPD and IPD patients	6
10	10.Quality Control Practicals	2	• **1 Minerals & Metals** Mineral Identification • Physical form – Crystal and	38

			Amorphous • Hardness on Moh's scale • Brittleness test • Fracture and Cleavage • Streak Test • Luster **2 Plant Material** • Estimation of Foreign matter • Specific Gravity • Refractive Index **3. Prepared Dosage forms** A. Solid Dosage Forms Rasaushadhi • Bhasma and Pishti Pariksha • Determination of Moisture content **4. Kashtoushadhi** a. Churna • Particle Size • Bulk Density • Determination of Ash Value – Total Water Soluble/Acid Insoluble ash b. Tablets • Uniformity in Weight and Size • Tablet Hardness B. Semisolid Dosage forms • Moisture Content • Microbial Load C. Liquid Dosage Forms • PH Value • Refractive Index • Specific Gravity • Saponification Value • Iodine Value • Acid Value • Viscosity **Note :** • All Practical should be performed in Accordance of Methods published in protocol for testing of ASU Medicines and	

			Laboratory Guide for Analysis of Ayurveda & Siddha formulations published by Dept of AYUSH, GOI • Minimum 5 Analytical Practicals are to be written in Practical Record or In Journal	
				Total Hr **210**

Activity

CO	Topic name	Activity Details	Hours#
CO1,CO2	Paper I -1. Chronological development of Ayurvediya Aushadhi Nirmana	**Objective** - To orient the students regarding chronological development of Rasashastra & Bhaishajya Kalpana After completing this activity, students will be able to: • Describe the history of Rasashastra & Bhaishajya Kalpana. • Identify the different types of metal-based medicines. • Explain the benefits of metal-based medicines. • Discuss the safety of metal-based medicines. **Methodology** 1) All students are to be assigned to collect and compile information on chronological	1

		development of Rasashastra & Bhaishajya Kalpana from different books, including Indians are the first, who introduced metal based medicines. 2) Ask to Submit the assignment for signature	
CO1,CO2	Paper I - 2. a) Paribhasha(Terminology)	**Rasadravya** **Objective** - To encourage the students to remember rasadravyas and their classification through games **Activity** **Group I** -In one big tray all Rasa - Dravyas are to be kept together. Timer to be started. In a stipulated time, student has to collect drugs belonging to the particular class (rasadravya varga) allotted to him /her and create a heap in order This can be given in a group. **Group 2.**-Word puzzle Various word puzzles can be created for making the students to remember names of rasadravyas along with their class.	1
CO1,CO3	Paper I -2. b)Paribhasha	**Mana Paribhasha Objective** - After completing this activity, students will be able to:	2

		• weigh dry & wet drugs • Understand the % of weight loss after drying different variety of the wet drugs • Enjoy (game based) learning about rasadravyas and their classification. **Methodology-** whole batch need to be divided into various groups. (4-5 students in each group). Each group need to make a chart/ task as per the instructions written on the paper they pick up. 1) Collect seeds mentioned in the classical mana paribhasha and prepare chart describing details of mana 2) Measure by weight the given drug. (Guduchi Bharad, Amalaki Bharad, Haritaki Churna, Nimbapatra churna, whole maricha all will be kept having same weight) Now observe how much volume these drugs have. 3) Collect fresh Guduchi.500gm or any fresh drugs leaf, bark, flower etc. Keep on observing the reduction in the weight of the sample till it dries completely. Record weight every day. Discussion about observation will be done. Do this same for Vasa, Shatavari, Amalaki also. Compare and assess the results. Every year drugs need to be changed	
CO1,CO2	Paper I -2. c)Paribhasha Terminology	**Shodhana**	1

Objective - To enhance ability of the students to recall their knowlege about rasadravyas and their procedures

At the end of Activity, the students should be able to

Recall the different shodhana methods that are used for rasadravyas.

• Identify the different yantras that are used for shodhana.

• Understand the different procedures that are used for shodhana.

• Correctly answer questions about shodhana methods, yantras, and procedures.

• Explain the different steps involved in the shodhana process.

• Discuss the benefits of shodhana for rasadravyas.

Activity-

Rapid Fire quiz online

Questions will be framed based on the knowlegde of Yanra, Dravya, Method used for that drug etc and rapid fire round will be carried out.This can be done online

Questions for example-

1) Vanga Shodhan is done by which method?

2) Which yantra is used for Shankha Shodhan?

		3) LashunaSvarasa bhavana is used for shodhana of which drug?	
CO1,CO2	**Paper I- 3.Adharabhuta Siddhanta (Fundamental Principles)**	**Objective :** To understand the concept with the help of classical shloka & application of fundamental principles of Ayurvediya aushadhi nirmana. **After completing this activity, students will be able to:** • Identify the different fundamental principles of Ayurvediya Aushadhi Nirmana. • Illustrate how these principles are applied in the preparation of Ayurvedic formulations. • Interpret classical shlokas related to the application of fundamental principles using Panchavayavavakya. • Demonstrate the skill of interpreting classical shlokas using Panchavayavavakya. • Students are to be divided into 5 groups • Each group need to be given 2 Shlokas from particular classical text book **Method of Activity:** 1. The students are divided into groups & each group need to be allotted 1 to 2 shlokas from classics related to application of fundamental principles. 2. To develop skill of interpretation of shloka by applying Panchavayava vakya i.e Pratignya,	2

		Hetu, Udhaharana,Upanaya and nigamana 3. They will understand application of basic fundaments. 4. Every year different sets of shlokas are to be given. Repetition of shlokas is not acceptable **Discussion:** After completion of task, discussion need to be held with teacher and students. Teacher in charge will finally conclude the discussion on application of fundamental principles and understanding the shloka by applying Panchavayavavakya. **Optional Activity** Activity - 1 Title : Search references from classical text Group : Students should be divided in to 10 groups. Reference Text : 1.Chakradatta 2.Yogaratnakara 3.Bhavaprakasha 4.Sharangadhara 1GP : DravyaSamgraha method 2 GP : Collection Time 3 Gp :Collection Part 4 GP : Examples of Samskara 5 GP :Collection Nakshatra 6 GP :Pranija dravya partcollection 7 GP :Duplication Yoga 8 GP : Namakarana on Mana/Number of Dravya 9 GP : Saveeryata Avadhi 10 GP : Anupana in classical Yoga	

CO1,CO5	**Paper I** **-4.Yantropakaranani - I (Equipments and machineries)**	**Objectives:-** After completing this activity, students will be able to: • Identify the different yantras that are used in the preparation of Ayurvedic formulations. • interpret the different procedures of drug preparation that use yantras. • Collect information on different yantras from classical text books. • Present their findings in a clear and concise way. **Actvity** • Students need to be divided into 4 groups (15 to 25 students in each group) • Each group need to be given one reference book • They have to collect information on different yantras explained /used for different procedures of drug preparation from that book. • Books like Ananda kanda, Rasa Tarangini, Rasa Ratna Samuchyaya, Rasendra Sara Sangraha, Parada Samhita etc can be given • Every year digfferent books are to be given. • Each Group has to present/ Submit assignment on total no of Yantras mentioned, their different uses, Structure/ Picture etc **Discussion**: In charge teacher will comment on particular group performance and study matter	4

		collected.	
CO1,CO5	**Paper I** **-5.Yantropakaranani - II (Equipments and machineries)**	**Objective:-** After completing this activity, students will be able to: • Prepare a video/ppt demonstration on Musha, Koshthi and Puta. • Model the preparation of Musha, Koshti and Puta. • Collect literature on Musha, Koshti and Puta from classical text books as per different authors. • Identify modern/presently available Yantras based on the classical concept of Musha, Koshti and Puta. **Actvity** **Students are to be divided into 4 groups** **Group I-** is allotted to prepare video/ppt demonstration **Group II-**Model preparation of Musha, Koshthi and Puta **Group III-** Literature collection from classical text books as per different authors on Musha, Koshthi and Puta **Group IV** - Modern / Presently available Yantras based on the classical concept of our yantra, Musha, Koshthi and Puta **Note:** Every year different yantras/ instruments need to be given	4

		Discussion and Conclusion: Each group has to present their activity followed by teacher's remark	
CO1,CO2	**Paper I- 6. Kalpana Nirmana I(Primary & Secondary dosage forms)**	**Objective:-** **After completing this activity, students will be able to:** • Identify the different dosage forms that are commonly used in Ayurveda. • Appraise the different methods that are used to prepare these dosage forms. • Document the different activities that are performed at home and in communities/societies related to the preparation of these dosage forms. • Prepare two dosage forms in the laboratory from their observation of home preparations. **Methodology:** 1. Every student will document different activities performed at home and in societies/communities related to the preparation of different dosage forms which come under Panchavidha kashaya kalpana , Upakalpana and their household applications.(for example-fruit juices belong to svarasa kalpana, chutney to kalka etc.) Discussion: 1.The students will be assessed based on their documentation 2. A group containing 10 number of students will be asked to collect the raw materials and prepare	4

		minimum two numbers of dosage forms in the laboratory from their observation of home preparations. 3. Finally an interactive session will be held to discuss the learning experiences and to clear doubts	
CO5	Paper I- 7 & 11. Kalpana Nirmana II &III (Method of preparation of different dosage forms & dietary supliments)	**objective: -** **After completing this activity, students will be able to:** • Identify the different dosage forms that are commonly used in Ayurveda. • Appraise the different methods that are used to prepare these dosage forms. • Document the different activities researches related to the preparation of these dosage forms. **Methodology: -** 1.Students need to be divided into 4 different groups. 2.**Group 1 -** Directed to collect information on different varieties of proprietary Ayurvedic and contemporary solid dosage forms available in the market through e-resources (e.g. tablets, capsules, lozenges etc) 3.**Group 2**- Directed to collect information on different varieties of proprietary Ayurvedic and contemporary Liquid dosage forms available in the market through e-resources (e.g. Oils, syrups, suspensions etc) 4.**Group 3** - Directed to collect information on	10

		different varieties of proprietary Ayurvedic and contemporary semisolid dosage forms available in the market through e-resources (e.g. ointments, gels, jellies etc) 5.**Group 4** - Directed to collect research articles published on modification of classical Ayurvedic dosage forms through e-resources on solid, liquid and semisolid dosage forms. Discussion: -Finally Students have to present the collected information in the form of power point presentation and submit the assignment. In charge teacher has to conclude by stressing upon scope for research and development in modification of classical dosage forms. The mentioned activity is an example. **Note:** Every year different formulations/ dosage forms/ activity need to be given.	
CO1,CO2,CO3	**Paper I- 8.Rasa Dravya Parichaya - I MK**	**Objecives:-** **After completing this activity, students will be able to:** • Justify the importance of identifying genuine Rasa Dravyas. • Learn to interpret classical and mineralogical criteria for identifying Rasa Dravyas. • Communicate findings effectively **Method of Activity:** 1. Students are to be divided into 4 to 5 groups 2. Each group is to be given 5 Rasadravyas (from	4

		must to know dravya list). 3. Students will be instructed to collect raw samples/ Pictures / Photos of assigned Rasa Dravya 4. Students have to interpret classical as well as mineralogical criteria for identifying that Rasa Dravya. 5. Encourage them to develop the skill of identification of various Rasa Dravyas and to understand its necessity. **Discussion & Conclusion** Each Group has to share the presentation. Finally, teacher has to give concluding remarks. **Note:** The mentioned activity is an example. Every year different sets of drugs/ activity need to be given.	
CO1,CO2,CO3	**Paper I-9.Rasa Dravya Parichaya II - DK**	**Objectives :-** **After completing this activity, students will be able to:** • Document the different rasa dravyas that are considered to be desirable to know. • Gather information about each rasa dravya, such as its Sanskrit name, English name, synonyms, botanical name, physical appearance, taste, and medicinal properties. • Present the findings in a clear and concise way.	6

		• Debate and justify that their drug is more superior than other drugs in the same group. **Method of Activity:** 1. Students are to be divided into 4 groups 2. The students will be instructed to refer and collect photos, general information, medicinal uses from classical text books and e resources. 3. Each group is to be given 2 drugs. 4. The mentioned activity is an example. Every year different rasadravya / activity need to be given. **Discussion:** After the completion of compilation of desirable to know Rasa Dravya, each group will present short review of their work in front of the class and they have to debate and justify that their drug is more superior than other drugs in the same group. Finally, teacher have to give concluding remark on debate.	
CO3	**Paper I- 10.Rasa Dravya Parichaya - III NK**	**Objectives :-** **After completing this activity, students will be able to:** • Document the different rasa dravyas that are considered to be desirable to know. • Gather information about each rasa dravya, such as its Sanskrit name, English name, synonyms, botanical name, physical appearance,	6

		taste, and medicinal properties. • Present the findings in a clear and concise way. • Debate and justify that their drug is more superior than other drugs in the same group.To compile, understand and document basic information about certain Rasa Darvyas. (this activity is for nice to know dravyas) **Methodology:** 1. Students are to be divided into 4 groups 2. The students will be instructed to refer and collect photos, general information, medicinal uses of given dravyas from classical text books and e resources. 3. Each group is to be given 4 drugs. 4. The mentioned activity is an example. Every year different drugs/ activity need to be given. **Discussion:** After the completion of compilation of nice to know Rasa Dravya, each group will present short review of their findings, in front of class and they have to debate and justify that their drugs are more superior than other drugs. Finally, teacher have to give concluding remark on debate. Note: Every year different drugs are to be given.	

CO1,CO2,CO3,CO5	**Paper I - 12.Chaturvidha Rasayana -MK**	**Objectives:-** • Collect information on different Chaturvidha Rasa formulations. • Identify the different manufacturing companies that produce Chaturvidha Rasa formulations. • appraise the different classical references that are used to manufacture Chaturvidha Rasa formulations. • Compare the MRP (prices) of different Chaturvidha Rasa formulations. • Identify the indications for different Chaturvidha Rasa formulations. • Analyze the different Chaturvidha Rasa formulations and develop critical thinking skills. • Communicate their findings effectively to the class. **Method of Activity: (Survey)** **Students are to be divided into 5 groups** **1. Group 1-** Need to be assigned to collect information on Swarna Bhasma manufacturing companies, classical references they follow to manufacture it, MRP (prices) and indications **2. Group 2-** Need to be assigned to collect varieties of parpati containing suvarna bhasma as one ingredient in it, their manufacturing companies, classical references they follow to manufacture it, MRP (prices) and indications **3. Group 3-** Need to be assigned to collect varieties of kupipakwa rasayanas containing suvarna bhasma as one ingredient in it,	4

		manufacturing companies, classical references they follow to manufacture it, MRP (prices) and indications **4. Group 4 -** Need to be assigned to collect varieties of pottali rasayanas containing suvarna bhasma as one ingredient in it, manufacturing companies, classical references they follow to manufacture it, MRP (prices) and indications **5. Group 5 -** Need to be assigned to collect varieties of kharaliya rasayanas containing suvarna bhasma as one ingredient in it, manufacturing companies, classical references they follow to manufacture it, MRP (prices) and indications 6.The mentioned activity is an example. Every year different formulations/ activity need to be given. **Discussion:** All groups have to present their assignment and finally in charge teacher has to give conclusion of importance of swarnakalpa. rationality behind following different references and probable variation in their cost.	
CO1	**Paper I- 13.Current and Emerging Trends in Ayurvedic pharmaceuticals**	**Objectives:** - • Identify the current and emerging trends in Ayurvedic Pharmaceuticals. • Analyze the potential impact of these trends on the future of Ayurvedic Pharmaceuticals. • Review and record the commonly used modified dosage forms of Ayurvedic	4

		formulations. • Evaluate the potential of these modified dosage forms to improve the efficacy and safety of Ayurvedic formulations. **Method of Activity** Students need to be divided into 3 groups **Group 1**. List the current and emerging trends in Ayurvedic Pharmaceuticals viz. cosmetics, Neutraceuticals, Herbaceuticals **Group 2**. Review and record the commonly used modified dosage forms of Ayurvedic formulations **Group 3.** Generate a folder on computer about relevant research articles on modified Ayurvedic dosage forms **Discussion :** All the above groups will present their assignment with their team and Exchange of Knowledge will take place followed by conclusion by faculty in charge	
CO4	Paper I - 14. GMP & Drug and Cosmetic act 1940 and rules 1945	**Objective:** **After completing this activity, students will be able to:** • Identify misleading advertisements under the Drug & Magic Remedies objectionable advertisements Act, 1954. • Analyze misleading advertisements and identify the specific provisions of the Act that are being violated.	4

		• Communicate their findings in a clear and concise way. **Methodology: -** **Students are to be divided into 5 students in each group** 1.Each group need to report two misleading advertisements under Drug & Magic Remedies - objectionable advertisements Act, 1954 advertising through TV channels, print media or electronic media etc. 2.The students will ask to submit details of objectionable advertisements in the prescribed format. **Discussion: -** After the submission of reports, the students will be asked to present and an interaction will be held between students and the concerned teacher (s) to understand the act & rules of objectionable advertisements as a learning experience.	
CO1	Paper II -1. Aushadhi Prayoga Vigyana	**Objective:** **After completing this activity, students will be able to:** • Understand the concept of Prashasta Bheshaja lakshana. • Identify the different aspects of Prashasta Bheshaja lakshana, such as bahu kalpam, bahugunam, and sampannam.	2

		• Gather information about a given drug/formulation and justify whether it is a Prashasta Bheshaja. • Communicate their findings in a clear and concise way. **Method of Activity** Students will be divided in Groups consisting of 10 Students in each group each group will be given one drug/Formulation They have to search information about Prashasta bheshaja on following aspects- 1.Bahu Kalpam 2.Bahugunam 3.Sampannam justify that the drug which they are allotted drug/formulation Each team will present their Justification followed by conclusion by designated faculty.	
CO1,CO3	**Paper II- 2.Single drug (Herbal & Mineral)**	**Objective:** **After completing this activity, students will be able to demonstrate their knowledge of herbal and mineral drugs by:** • Identifying and differentiating between	2

		different types of herbal and mineral drugs, with at least 5 examples of each. • Understanding the different formulations of herbal and mineral drugs, with at least 3 examples of each formulation. • Learning about the different indications for herbal and mineral drugs, with at least 3 examples of each indication. • Learning about the different anupanas that can be used with herbal and mineral drugs, with at least 3 examples of each anupana. • Understanding the importance of pathyaapatya, sevana kala, and saveeryatavadhi in the administration of herbal and mineral drugs. • Communicating their findings in a clear and concise way, including a presentation to the class that is clear, concise, and answers questions about the drugs. **Method of Activity** 1. Students need to divided into groups as per convenience 2. Each group need to be assigned with one herbal or one mineral drug or from both categories 3. Advised to collect information on assigned single drug/drugs variety of formulations, different indications when given in different form, with different anupana, Pathyaapatya, sevana kala, saveeryatavadhi and research updates and clinical evidences for each of the formulations 4. Every year different drugs are to be allotted to avoid repetition.	

CO1,CO2,CO3	**Paper II -3.Single Drug (Bhasma, Shuudha & Pishti)- Mk**	**Objective** **After completing this activity, students will be able to demonstrate their knowledge of market research by:** • Conducting a market survey of one or two bhasmas in a particular city. • Collecting and documenting information about the market demand for the bhasma, such as the price, the dosage, and the frequency of use. • Analyzing the data collected to determine the market trends for the bhasma. • Communicating their findings in a clear and concise way, including a presentation to the class. **Method of Activity:** 1.The students instructed to visit Ayurvedic drug store and collect information as given in the format. 2.Students need to be divided into 4 to 5 groups. Each group need to be given 1 to 2 drugs. (Every year different drugs are to be allotted to avoid repetition.) 3.Each group has to visit one to two Ayurvedic drug stores. Number of stores can be increased based on number of drug stores in the city or around the city.(based on information of online survey) After collecting information students have to submit survey forms to department	6

CO1,CO2	Paper II- 4. Aushadhi Kalpa-I(Compound Formulations)	**Horizontal Integration Activity with Department of Agada Tantra** **Objective** **After completing this activity,** • Students will be able to demonstrate their knowledge of the preparation and uses of agadas by: • Preparing five different agadas under the guidance of Rasashastra & Bk Dept faculty.. • Presenting their findings on the ingredients, method of preparation, uses, dosage, anupana, and mode of action of the agadas. • Communicating the utility of the agadas in different conditions, research updates with case studies, and dosage, anupana, and duration of agada kalpa prayoga. **Method of Activity** **Students will be divided into 5 groups** Each group will get hands on training to prepare one peculiar agada (mentioned in following list) and faculty from Agada Tantra department will give information about its utility in different Visha Laxana/or Stages of visha dushta.All details about agada kalpa prayoga viz.Dosage, Anupana, Duration will be discussed -2hrs Team 1: Bilavdi Agada Team 2: Dooshivishari Agada Team 3: Dashanga Agada Team 4: Murvadi Agada Team 5: Pancha Shireesha Agada Presentation will be done by all Teams on	4

		Ingredients, Method of Preparation, Video/ Photos of ingredients, preparation, uses, dosage, Anupana Every year different topics are to be selected for integrated activity. Repetition should be avoided. Discussion will be done on mode of action, utility of above prepared Agadas in different conditions, Research updates with Case studies by Agada Tantra Faculty	
CO3	**Paper II - 5. Aushadhi Kalpa - II(Compound drugs/ formulations)**	**Objective** **After completing this activity, students will be able to:** • Identify the different types of research updates and clinical evidences that are available for the formulations listed in the syllabus Aushadhi Kalpa - II(Compound drugs/ formulations). • Collect and compile research updates and clinical evidences for the formulations assigned to them. • Review the research updates and clinical evidences to determine their relevance and significance. • Communicate their findings in a clear and concise way. **Methodology of Activity :** 1.Students are to be divided into 5 to 6 groups 2.Each group is to be assigned 2 to 3 formulations in the syllabus.	2

		3.Groups are instructed to collect Research updates and clinical evidences for formulations assigned to them 4. Every year different formulations are to be allotted to avoid repetition. **Submission of Assignment:** After the completion of compilation groups have to submit the assignment for correction.	
CO4	Paper II - 6 Dosage forms & cosmetic productsPaper II- 7. Nutraceuticals	**objective** **After completing this activity, students will be able to:** • Identify the different types of cosmetic and nutraceutical products. • Understand the legal and regulatory requirements for these products. • Research the market for these products. • Analyze the quality control tests that are recommended for these products. • Prepare a report/assignment on the selected products. • Communicate their findings in a clear and concise way. • Answer questions about their findings. • Communicate the significance of various guidelines used for testing of food products and cosmetics in brief.	3

Methodology: -

1. Students are to be divided into 5-6 groups

2. Each group need to be given one to two cosmetic or nutraceutical products for eg. Lipstick, lip balm, Energy drink, Nutritional supplement for children, working women, pregnant women etc.

3.The students will be asked to prepare a report/assignment on number of companies selling such products. Information should be compiled about their major ingredients, preservatives, price, market value, quality control tests recommended etc.

4. For that Nutritional Product, the students will be asked to go through the quality parameters and nutritional values displayed on packages of food products as per the guidelines of Food Safety and Standards Authority of India (FSSAI).

5. Every year different products are to be allotted to avoid repetition

Discussion: - After the submission of reports, a discussion will be held among the students and the teacher(s) to understand the significance of various guidelines used for testing of food products and cosmetics in brief.

Optional Activity

Objectives-

after completion of the course students should be able to prepare dosage forms and self care products in the syllabus.

Short term course/ Module

		Online/offline mode in collaboration with Pharmacy college Dosage Forms & Self-care Products Assessment through MCQ's Duration of the course may be 22hrs including online assessment	
CO1,CO3,CO6	Paper II- 8 Anupana Prayoga for Aushadhi KalpaPaper II- 9. Aushadhi Prayoga Marga	**Objective** **After the completion of this activity** • Students should be able to explain/present the probable pharmacokinetic and pharmacodynamic principles of assigned Ayurvedic drugs & Anupana in different condition or indication **Method of Activity: -** 1.Students will be divided into 5 to 6 groups 2.Each group need to be allotted formulations/ single drug/Bhasma/Pishti etc 3.Students are asked to explain the therapeutic importance of five formulations with respect to different Anupana, Aushadhiprayoga marga and their utility in different disorders with the probable pharmacokinetic and pharmacodynamic principles involved in the use of assigned Ayurvedic drugs. 4. students have to submit assignment / sharing ppt presentation in the activity group **Discussion: -** After the completion of this task, students should be able to explain/present the probable pharmacokinetic and pharmacodynamic principles of assigned Ayurvedic drugs. In charge teacher has to conclude on collection of compiled matter and drugs action.	2

CO3	Paper II 10. Rational prescription along with safe dispensing of Ayutrvedic formulations.	**Objective** **After completing this activity, students will be able to:** • Identify the different components of a prescription. • Analyse the prescriptions to determine whether they are rational. • Discuss the significance of ideal prescription and rationality of use of drugs in Ayurveda. **Methodology: -** 1.Students are to be divided into 4 to 5 groups 2.Each group is advised to collect 4 to 5 prescriptions from different departments of the hospital. 3.The students are asked to visit hospital to go through the randomly selected five prescriptions for promoting them to know the ideal prescription and rational use of drugs. 4.The students will be asked to present their review of this activity during the non-lecture hours. 5.Strictly instructions should be given to maintain confidentiality about patient's name and consultant's name. **Discussion: -** After the completion of the task, an interaction will be held among the students and the concerned teacher (s) to understand the	4

		significance of ideal prescription and rationality of use of drugs in Ayurvedic practices.	
CO1,CO5	Paper II 11. Traditional and local health practices	**Objective** **After completing this activity, students will be able to:** • Identify different types of traditional healers in their local area/region. • Interview traditional healers to understand their practices. • Document the practices of traditional healers in a way that is respectful and preserves their knowledge. • Communicate the findings of their research to others. **Methodology :** 1. To understand the practices of traditional healers/ Folklore healers- the students are instructed to visit and meet some of the folk healers / traditional healers who have been practicing since ages in their local area/region. During their holiday/vacation students can complete this survey in and around the institute or near their residential place. 2. The students may act as a bridge between Ayurveda and traditional/local healers by making them understand the beneficial effect of technology and how this can help the healers to expand their treatment to a larger mass. Because many a times it has been observed that the healers are reluctant or they don't entertain the students who come to meet them for fear of exploitation or theft of their knowledge.	4

		3. By doing this practice, the healers will develop confidence on students which helps in collecting /documenting practices, through which a new horizon may open in the field of medicinal research. **Discussion:** After the completion of the visit, an interaction need to be held among the concerned teachers and students to discuss the learning experiences, and try to find out difficulties so that in future those things can be managed or avoided to make things easier.	
CO4	Paper II 12. Pharmacovigilance for Ayurveda drugs	**Objective** **After completing this activity, students will be able to:** • Identify the different types of adverse drug reactions (ADRs). • Describe the detection criteria for ADRs. • Explain the assessment techniques for ADRs. • Discuss the prevention criteria for ADRs. • Able to fill out an ADR reporting format **Methodology: -** The students will be asked to visit hospital or go through the previously reported cases to discuss for detection criteria, assessment techniques, understanding and prevention criteria of ADRs. Every student is assigned to fill up the ADR reporting format by allotting imaginary situation/ real case	4

		Discussion: - After the visit, an interaction will be held among the concerned teacher(s) and the students to discuss the learning experiences, and the importance of ADRs, their assessment and reporting techniques.	

Hours indicated are included in calculations of Table 3 and 4

Table 5- Teaching learning method

Sr No	Teaching learning methods in the course	No of Activities
1	Lecture	15
2	Lecture with Power point presentation	82
3	Lecture & Group Discussion	25
4	Lecture with Video clips	14
5	Discussions	46
6	Brainstorming	29
7	Inquiry-Based Learning	25
8	PBL	1
9	CBL	1
10	Project-Based Learning	15
11	Team project work	12
12	Blended Learning	1
13	Edutainment	1
14	Mobile learning	2
15	Self-directed learning	23
16	Problem solving method	2
17	Workshops	1
18	Game-Based Learning	2
19	Demo on Model	2
20	Library Session	7

21	Peer learning	1
22	Real life experience	5
23	Recitation	2
24	Symposium	1
25	Tutorial	2
26	Presentations	2
27	Practical	7
28	Drug analysis	1
29	Demonstration	2
30	Demonstration Lab	4
31	Field visit	2

These are overall teaching learning methods listed in Table 3 and 4. Teachers can select the best possible method amongst the given methods as per objective, available time etc.

Table 6: Assessment Summary: Assessment is subdivided in A to H points

6 A-Number of Papers and Marks Distribution

Subject Code	Papers	Theory	Practical/Clinical Assessment					Grand Total
			Practical	Viva	Elective	IA	Sub Total	
AyUG-RB	2	200	100	70	-	30	200	400

6 B - Scheme of Assessment (formative and Summative)

PROFESSIONAL COURSE	DURATION OF PROFESSIONAL COURSE		
	First Term (1-6 Months)	Second Term (7-12 Months)	Third Term (13-18 Months)
Second	3 PA & First TT	3 PA & Second TT	3 PA & UE **

PA: Periodical Assessment; **TT:** Term Test; **UE:** University Examinations.

** University Examination shall be on entire syllabus

6 C - Calculation Method for Internal assessment Marks

TERM	PERIODICAL ASSESSMENT*					TERM TEST**	TERM ASSESSMENT	
	A 2	B	C	D	E	F	G	H
	1 (15 Marks)	2 (15 Marks)	3 (15 Marks)	Average (A+B+C/ 3)	Converted to 30 Marks (D/15*30)	Term Test (Marks converted to 30)	Sub Total _/60 Marks	Term Ass essment (…./30)
FIRST							E+F	(E+F)/2
SECOND							E+F	(E+F)/2
THIRD						NIL		E
Final IA	Average of Three Term Assessment Marks as Shown in 'H' Column.							
	Maximum Marks in Parentheses *Select an Evaluation Method which is appropriate for the objectives of Topics from the Table 6 D for Periodic assessment. Conduct 15 marks assessment and enter marks in A, B, and C. ** Conduct Theory (100 Marks)(MCQ(20*1 Marks), SAQ(8*5), LAQ(4*10)) and Practical (100 Marks) Then convert to 30 marks.							

6 D - Evaluation Methods for Periodical Assessment

S. No	Evaluation Methods
1	Activities Indicated in Table 3 - Column G3 as per Indicated I, II or III term in column I3

Evaluation Methods in MSE

1. Practical / Clinical Performance
2. Viva Voce, MCQs, MEQ (Modified Essay Questions/Structured Questions)
3. Open Book Test (Problem Based)
4. Summary Writing (Research Papers/ Samhitas)
5. Class Presentations; Work Book Maintenance
6. Problem Based Assignment
7. Objective Structured Clinical Examination (OSCE), Objective Structured Practical Examination (OPSE), Mini Clinical Evaluation Exercise (Mini-CEX), Direct Observation of Procedures (DOP), Case Based Discussion (CBD)
8. Extra-curricular Activities, (Social Work, Public Awareness, Surveillance Activities, Sports or Other Activities which may be decided by the department).
9. Small Project etc.

6 E Question Paper Pattern

II PROFESSIONAL BAMS EXAMINATIONS
AyUG-RB
PAPER-1
Time: 3 Hours Maximum Marks: 100
INSTRUCTIONS: All questions compulsory

		Number of Questions	Marks per question	Total Marks
Q 1	MULTIPLE CHOICE QUESTIONS (MCQ)	20	1	20
Q 2	SHORT ANSWER QUESTIONS (SAQ)	8	5	40
Q 3	LONG ANSWER QUESTIONS (LAQ)	4	10	40
				100

Similar for Paper II

6 F Distribution of theory examination

Paper 1 Ayurvediya Aushadhi Nirmana Vigyana						
Sr. No	**A List of Topics**	**B Term**	**C Marks**	**MCQ (1 Mark)**	**SAQ (5 Marks)**	**LAQ (10 Marks)**
1	**1.Chronological development of Ayurvediya Aushadhi Nirmana**	1	05	No	Yes	No
2	**2.Paribhasha (Terminology)**	1	10	Yes	Yes	No
3	**3.Adharbhuta Siddhanta (Application of fundamental principles)**	1	05	Yes	Yes	No
4	**4.Yantropakaranani- I (Equipments and machineries)**	1	05	Yes	Yes	No
5	**5.Yantropakaranani -II (Equipments, fuel and Heating Devices)**	1	05	Yes	Yes	No
6	**6.Kalpana Nirmana I (Primary & Secondary dosage forms)**	1	10	Yes	Yes	Yes
7	**7.Kalpana Nirmana-II (Method of Preparation of different dosage forms& Dietary Supplements))**	1	10	Yes	Yes	Yes
8	**8.Rasa Dravya Parichaya- I**	2	10	Yes	Yes	Yes
9	**9.Rasa Dravya Parichaya II**	2	5	Yes	Yes	No
10	**10.Rasadravya Parichaya III**	2	5	Yes	No	No
11	**11.Kalpana Nirman -III (Method of Preparation of different dosage forms)**	2	10	Yes	Yes	Yes
12	**12.Chaturvidha Rasayana**	2	10	Yes	Yes	Yes
13	**13.Current and emerging trend in Ayurvedic pharmaceuticals**	3	5	No	Yes	No

14	**14.GMP(Schedule T) & Regulatory aspects of Ayurvedic drugs**	3	5	Yes	Yes	No
Total Marks			**100**			

Paper 2 Ayurvediya Aushadhi Prayoga Vigyana						
Sr. No	**A List of Topics**	**B Term**	**C Marks**	**MCQ (1 Mark)**	**SAQ (5 Marks)**	**LAQ (10 Marks)**
15	**1.Aushadhi Prayoga Vigyana**	1	5	Yes	Yes	No
16	**2.Single drug (Herbal & Mineral)**	1	10	Yes	Yes	Yes
17	**3.Single drug(Bhasma, Shuddha & Pishti)**	2	15	Yes	Yes	Yes
18	**4.Aushadhi Kalpa -I (Compound formulations)**	2	15	Yes	Yes	Yes
19	**5.Aushadhi Kalpa-II (Compound Drugs/Formulations)**	3	15	Yes	Yes	Yes
20	**6.Dosage Forms & Cosmetic Products**	3	5	Yes	Yes	No
21	**7.Nutraceuticals**	3	5	Yes	Yes	No
22	**8.Anupana Prayoga for Aushadhi Kalpa**	3	5	Yes	Yes	No
23	**9.Aushadhi Prayoga Marga**	3	10	Yes	Yes	Yes
24	**10.Rational prescription along with safe dispensing of Ayurvedic formulations.**	3	5	No	Yes	No
25	**11.Traditional & Local health Practices**	3	5	No	Yes	No
26	**12.Pharmacovigilance for Ayurveda drugs**	3	5	Yes	Yes	No
Total Marks			**100**			

6 G Blue print of paper I & II

Paper No:1		
Question No	**Type of Question**	**Question Paper Format**
Q1	**Multiple choice Questions** **20 Questions** **1 mark each** **All compulsory** **Must know part - 15 MCQ** **Desirable to know - 3 MCQ** **Nice to know part - 2 MCQ**	**1.** 2.Paribhasha (Terminology) **2.** 2.Paribhasha (Terminology) **3.** 2.Paribhasha (Terminology) **4.** 4.Yantropakaranani- I (Equipments and machineries) **5.** 5.Yantropakaranani -II (Equipments, fuel and Heating Devices) **6.** 6.Kalpana Nirmana I (Primary & Secondary dosage forms) **7.** 6.Kalpana Nirmana I (Primary & Secondary dosage forms) **8.** 6.Kalpana Nirmana I (Primary & Secondary dosage forms) **9.** 7.Kalpana Nirmana-II (Method of Preparation of different dosage forms& Dietary Supplements)) **10.** 7.Kalpana Nirmana-II (Method of Preparation of different dosage forms& Dietary Supplements)) **11.** 8.Rasa Dravya Parichaya- I **12.** 8.Rasa Dravya Parichaya- I **13.** 8.Rasa Dravya Parichaya- I **14.** 8.Rasa Dravya Parichaya- I **15.** 9.Rasa Dravya Parichaya II **16.** 10.Rasadravya Parichaya III **17.** 11.Kalpana Nirman -III (Method of Preparation of different dosage forms) **18.** 12.Chaturvidha Rasayana **19.** 12.Chaturvidha Rasayana **20.** 14.GMP(Schedule T) & Regulatory aspects of Ayurvedic drugs
Q2	**Short answer Questions** **Eight Questions** **5 Marks Each** **All compulsory** **Must know - 7 SAQ** **Desirable to know - 1 SAQ** **No questions on Nice to know**	**1.** 1.Chronological development of Ayurvediya Aushadhi Nirmana **2.** 3.Adharbhuta Siddhanta (Application of fundamental principles) / 2.Paribhasha (Terminology) **3.** 9.Rasa Dravya Parichaya II / 4.Yantropakaranani- I (Equipments and machineries) / 5.Yantropakaranani -II (Equipments, fuel and Heating Devices) **4.** 6.Kalpana Nirmana I (Primary & Secondary dosage forms) **5.** 7.Kalpana Nirmana-II (Method of Preparation

		of different dosage forms& Dietary Supplements)) **6.** 9.Rasa Dravya Parichaya II / 8.Rasa Dravya Parichaya- I **7.** 12.Chaturvidha Rasayana **8.** 14.GMP(Schedule T) & Regulatory aspects of Ayurvedic drugs / 13.Current and emerging trend in Ayurvedic pharmaceuticals
Q3	**Long answer Questions** **Four Questions** **10 marks each** **All compulsory** **All questions on must know. No Questions on Nice to know and Desirable to know**	**1.** 6.Kalpana Nirmana I (Primary & Secondary dosage forms) **2.** 7.Kalpana Nirmana-II (Method of Preparation of different dosage forms& Dietary Supplements)) **3.** 8.Rasa Dravya Parichaya- I **4.** 11.Kalpana Nirman -III (Method of Preparation of different dosage forms) / 12.Chaturvidha Rasayana
Paper No:2		
Question No	**Type of Question**	**Question Paper Format**
Q1	**Multiple choice Questions** **20 Questions** **1 mark each** **All compulsory** **Must know part - 15 MCQ** **Desirable to know - 3 MCQ** **Nice to know part - 2 MCQ**	**1.** 1.Aushadhi Prayoga Vigyana **2.** 2.Single drug (Herbal & Mineral) **3.** 2.Single drug (Herbal & Mineral) **4.** 3.Single drug(Bhasma, Shuddha & Pishti) **5.** 3.Single drug(Bhasma, Shuddha & Pishti) **6.** 3.Single drug(Bhasma, Shuddha & Pishti) **7.** 3.Single drug(Bhasma, Shuddha & Pishti) **8.** 4.Aushadhi Kalpa -I (Compound formulations) **9.** 4.Aushadhi Kalpa -I (Compound formulations) **10.** 4.Aushadhi Kalpa -I (Compound formulations) **11.** 4.Aushadhi Kalpa -I (Compound formulations) **12.** 5.Aushadhi Kalpa-II (Compound Drugs/Formulations) **13.** 5.Aushadhi Kalpa-II (Compound Drugs/Formulations) **14.** 5.Aushadhi Kalpa-II (Compound Drugs/Formulations) **15.** 5.Aushadhi Kalpa-II (Compound Drugs/Formulations) **16.** 6.Dosage Forms & Cosmetic Products

		17. 7.Nutraceuticals **18.** 8.Anupana Prayoga for Aushadhi Kalpa **19.** 9.Aushadhi Prayoga Marga **20.** 12.Pharmacovigilance for Ayurveda drugs
Q2	**Short answer Questions** **Eight Questions** **5 Marks Each** **All compulsory** **Must know - 7 SAQ** **Desirable to know - 1 SAQ** **No questions on Nice to know**	**1.** 8.Anupana Prayoga for Aushadhi Kalpa / 1.Aushadhi Prayoga Vigyana **2.** 2.Single drug (Herbal & Mineral) **3.** 3.Single drug(Bhasma, Shuddha & Pishti) **4.** 4.Aushadhi Kalpa -I (Compound formulations) **5.** 5.Aushadhi Kalpa-II (Compound Drugs/Formulations) **6.** 7.Nutraceuticals **7.** 9.Aushadhi Prayoga Marga **8.** 12.Pharmacovigilance for Ayurveda drugs / 10.Rational prescription along with safe dispensing of Ayurvedic formulations. / 6.Dosage Forms & Cosmetic Products / 11.Traditional & Local health Practices
Q3	**Long answer Questions** **Four Questions** **10 marks each** **All compulsory** **All questions on must know. No Questions on Nice to know and Desirable to know**	**1.** 2.Single drug (Herbal & Mineral) / 9.Aushadhi Prayoga Marga **2.** 3.Single drug(Bhasma, Shuddha & Pishti) **3.** 4.Aushadhi Kalpa -I (Compound formulations) **4.** 5.Aushadhi Kalpa-II (Compound Drugs/Formulations)

6 H Distribution of Practical Exam

S.No	Heads	Marks
1	**1.Spotting (10 sample + 5 Instruments/ equipments)** **Identification (1 mark) answering sub question related to spotter(1 mark) 15x2=30 marks Choose spotter from below mentioned list** 1. Parada (mercury), 2. Abhraka (Biotite Mica), 3. Makshika (Chalco-pyrite), 4. Shilajatu(Asphaltum Punjabianum) 5. Gandhaka (Sulfur) 6. Gairika(Red Ochre) 7. Kankshi (Alum) 8. Haratala (Orpiment) 9. Manahshila (Realgar) 10. Kampillaka(Mallotus Philippinensis) 11. Navasadara (Ammonium chloride) 12. Hingula (Red Cinnabar) 13. Tamra (Copper) 14. Loha (Iron) 15. Mandur (rust iron) 16. Vanga (Tin) 17. Naga (Lead) 18. Yashada (Zinc) 19. Pravala (Coral) 20. Kaparda (Cowries) 21. Shukti (Oyster Shell) 22. Shankh (Conch Shell) 23. Godanti (Gypsum) 24. Samudraphena (Cattle Fish bone) 25. Kukkutanda twak (Hen's EggShell), 26. Tankana kshara (Borax) 27. Sasyaka (Peacock ore) 28. Kasisa (Green Vitriol), 29. Gauri pashana (Arsenic oxide) 30. Akika(Agate), 31. Sudha (Lime stone) 32. Khatika 33. Dugdhapashana (Talc) 34. Vimala 35. Rasaka 36. Yantra	30

	37. Dola Yantra 38. DamaruYantra 39. Valuka Yantra 40. Puta Yantra 41. Khalwa Yantra 42. Patana Yantra 43. Darvika Yantra 44. Ulukhala Yantra 45. Patala Yantra 46. Kupi Yantra 47. Arkapatana Yantra 48. Pithara Yantra 49. Sharava Yantra 50. Palika Yantra 51. Sthali Yantra 52. Swedana Yantra 53. Moh's scale 54. Tablet Hardness tester 55. Ph Meter 56. Muffle Furnace 57. Electronic Weighing machine 58. Pycnometer 59. Large scale manufacturing instruments & equipments in the syllabus Photos /Pictures may be used for spotting	
2	**2. Long Practical** • Selection of Ingredients with proportion(10Marks) • Preparation following SOP (15 marks) • Demonstration of Siddhi lakshana(05Marks) • on site viva (10 Marks) **List of Long Practicals** 1. Sitopaladi churna 2. Hingwastaka Churn 3. Agni Tundi Vati 4. Chitrakadi Vati 5. Lavangadi Vati 6. Triphala Guggulu 7. Kaishor Guggulu 8. Phala Varti 9. Chandrodaya Varti	40

	10. Arka Lavana 11. Narikela Lavana 12. Atasi Upanaha 13. Dashanasamskara churna 14. Gandhaka Malahara 15. Dashanga Lepa 16. Mustadi Pramathya 17. Shadanga Paneeya 18. Kharjuradi Mantha 19. Chincha Panaka 20. Chandana Panaka 21. Ghrita Murchana 22. Taila Murchana 23. Triphala Ghrita 24. Amruta Ghrita 25. Ksheera Bala Taila 26. Arka Taila 27. Vasavaleha 28. Nimbu Sharkara 29. Kutaja Ghana 30. Guduchi Ghana 31. Haridra Khanda 32. Narikela Khanda 33. Ananda Bhairava Rasa 34. Tribhuvana Keerti rasa 35. Rasa Parpati 36. Sweta Parpati 37. Laghusutsekhararasa 38. Navayasa loha 39. Saptamrita loha **Note: for preparation shuddha dravya, decoction,murchita gritha, murchita taila etc are to be provided for long practical**	
3	**3.Short Practical** • **Selection of Ingredients with proportion(5Marks)** • **Preparation following SOP (5 marks)** • **Demonstration of Siddhi lakshana(5Marks)** • **on site viva (5 Marks)** **List of Short Practicals** 1. Godanti Shodhana 2. Shankha Shodhana	20

	3. Kapardika shodhana 4. Guggulu Shodhana 5. Gandhaka Shodhana 6. Vanga Shodhana 7. Yashada shodhana 8. Abhraka Shodhana 9. Tamra Shodhana 10. Tankana Shodhana 11. Kankshi shodhana 12. Hingula Shodhana 13. Gairika Shodhana 14. Hingu Shodhana 15. Mugdha Rasa 16. Tamra Bhasma (Dadhi/ Nimbu Pariksha) 17. Triphala Masi 18. Mayura Piccha Masi 19. Vasaputapaka Swarasa 20. Amruta Satva 21. Arjuna Ksheera Paka 22. Lashuna Ksheerapaka 23. Punarnavashtaka kwatha 24. Rasna Saptaka Kwatha 25. Specific Gravity 26. Refractive Index 27. PH	
4	4.Practical Record Four Record books- for each record book 2.5 Marks	10
5	**5.Viva-Voce** **Structure of Viva** 1. Paribhasha – (2 questions 3 marks each) - 6 Marks 2. Shodhana, marana –(1 question from each 5 marks each) -10 Marks 3. Yantropakarana -–(2questions 3 marks each) - 6 Marks 4. Chemical composition Raasadravya -–(1 questions 2 marks each)-2 Marks 5. Therapeutic application of single drugs – (2 question 3 marks each) -6 marks 6. Yoga - (Shloka-3 marks; ingredients-5 marks: indications -5 marks	70

	dose & anupana-2Marks)-15Marks (Select the yoga having at least 5 ingredients) 7. Siddhi lakshana & quality control tests –(2 questions 5 marks each)-10 Marks 8. D& C act, GMP, FSSAI- 2 Marks 9. Viva on Non Lecture hour activity book-8 Marks 10. Communication skills -5 Marks	
6	**6. Internal assessment**	30
Total Marks		**200**

References Books/ Resources

S.No	Book	Resources
1	1. Adyatan Rasa Shastra	R.K. Goyal Chaukhamba Surbharati Prakashan, Varanasi
2	2.Ayurvediya Aushadhi gunadharma shastra	Vol I, II, III, IV, V, Gune Gangadharashastri, Gune Bandhu Prakashan
3	3. Asava Arishta Vigyanam	Dr. Pakshdhar Jha, Chaukhambha Sanskrit Sansthan, Varanasi
4	4. Ayurvediya Rasa Shastra	(Sachitra) Chandrabhusan Jha by Chaukhamba Surbharati Prakashan Varanasi, Reprint 2012
5	5.Ayurvediya Rasa Shastra	Prof. Siddhi Nandan Mishra, Chaukhamba Orientalia, Varanasi
6	6.Ayurved Prakash	Vaidya Gulraj Mishra. Chaukhambha Bharati Academy, Varanasi
7	7.Drugs and Cosmetic Act - 1940	Vijay Malik, Eastern Book Company Delhi
8	8. Pratyaksha Aushadh Nirmanam	Acharya Vishwanath Dwivedi
9	9.Rasa Tarangini	Sadanand Sharma,Motilal Banarasidas, Varanasi
10	10.Rasa Bhaishajya Kalpana Vigyan	Vaidya Santosh Kumar Khandal, Choukhamba Publishers, New Delhi
11	11.Rasa Ratna Samuchchaya (Hindi)	Dattattreya Ananta Kulkarni, Meharchand Lachamdas Publications,New Delhi
12	12.Rasendra Sara Sangraha	Vaidya Gopal Krishna, Chaukhambha Sanskrit Series of Varanasi
13	13.Ayurvediya Paribhasha	Indradev Tripathi Chaukhamba Orientalia, Varanasi
14	14.Sharangadhara Samhita	Radhakrishna Parashar Vaidyanath Ayurved Bhavan Pvt
15	15.Bharatiya Bhaishajya Kalpana Vigyana	Gananath Vishwanath Dwivedi Krishnadas Academy, Varanasi
16	16.Ayurvedic formulary of India	Govt. of India Ministry of Health & Family welfare New Delhi
17	17.Ayurvedic Pharmacopiea of India	CCRAS Govt. of India Ministry of Health & Family welfare New Delhi
18	18.Abhinava Bhaishajya Kalpana	Siddhi Nandan Mishra, Chaukhamba Surbharati Prakasha , Varanasi
19	19.Bhaishjya Ratnawali	Prof S N Mishra Choukhamba Publishers, Varanasi
20	20.Ayurvediya Rasashastra Ka Udbhava Evam Vikas	Satyendrakumar Arya, Krishnadas Academy, 1984

21	21.Yoga Ratnakar	Shri Laxmipathi Shastri, Chaukhambha Prakashana Varanasi, Reprint 2018
22	22.A Text book of Rasashastra	Prof. Parimi Suresh Chaukhambha Prakashak, Varanasi
23	23.Siddhoushadi Sangraha	Vaidyaratna G. A. Phadke, Ayurvedacharya, Satara, N. H Kolhatkar, Maharashtra mitra Mudranalaya, Shukravara peth, Satara
24	24.Application on standardised Namburi phased spot test in identification of Bhasma and Sindura preparations of Ayurveda published	Namburi Hanumantha Rao, CCRAS., New Delhi
25	25. Evidence based safety of Ayurvedic herbo-mineral formulations	Kumar Anhimanyu published by CCRAS, New Delhi
26	26. Introduction to Ayurvedic Pharmaceutics	Dr Devendra Joshi & Dr Geeta Joshi Chaukhambha Orientalia
27	27. A Handbook of Cosmetics	B. M. Mithal & R.N. Saha Published by Delhi Vallabh Prakashana
28	28. Sahasrayoga (Sanskrit and Hindi)	Reprint by CCRAS, New Delhi
29	29. Manual on Quality Parameters for Ayurveda & Siddha drugs	CCRAS, New Delhi
30	30.Safety and Prescription Trends of Rasaushadhis	Critical appraisal of Reported Medical Practices of Ayurveda Herbomineral formulations from CCRAS experience.
31	31. General Guidelines for Drug Development of Ayurvedic Formulations	CCRAS New Delhi, Volume I 1st Edn. 2018
32	32. General Guidelines for Safety/Toxicity Evaluation of Ayurvedic Formulations	CCRAS New Delhi, Volume II 1st Edn. 2018
33	33.General Guidelines for Clinical Evaluation of Ayurvedic Interventions	CCRAS New Delhi, Volume III 1st Edn. 2018
34	34. WHO internationalstandard terminologies on Ayurveda	WHO International Standard Terminology on Ayurveda, WHO 2022
35	35,Inorganic Pharmaceutical Chemistry	Gundu Rao P, Vallabha Prakashana
36	36, Organic Pharmaceutical Chemistry	Singh Harkishan;Kapoor V K, Vallabha Prakashana

37	37 Shlokavali of Rasashastra Bhaishajya Kalpana	Ninad Sathye;Shivaji Wavhal, Shantanu Prakashan Pune, 2009
38	38. Ansel"s Pharmaceutical Dosage Forms and Drug Delivery Systems	Loyd V Allen : Others, 9th volume, Lippincott Williams & Willkins Wolters Kluwer Co.2011
39	39. Laboratory Guide for the Analysis of Ayurveda and Siddha Formulations	Lavekar G S,Central Council For Research in Ayurveda & Siddha,2010
40	40. Pharmaceutics I & II	Mehta R M, Vallabha Prakashana, 2014
41	41.Central Drugs Standard Control Organization Directorate General of Health Services Ministry of Health & Family Welfare Government of India	https://cdsco.gov.in/opencms/opencms/en/Home/
42	42. FSSAI official website	https://www.fssai.gov.in/
43	43.PHARMACOPOEIA COMMISSION FOR INDIAN MEDICINE & HOMOEOPATHY OFFICIAL WEBSITE	https://pcimh.gov.in/

Abbreviations

Assessment

S.No	Short form	Discription
1	T-EMI	Theory extended matching item
2	T- EW	Theory Essay writing
3	T- MEQs	Theory MEQs
4	T-CRQs	Theory CRQs
5	T-CS	Theory case study
6	T-OBT	Theory open book test
7	P-VIVA	Practical Viva
8	P-REC	Practical Recitation
9	P-EXAM	Practical exam
10	PRN	Presentation
11	P-PRF	Practical Performance
12	P-SUR	Practical Survey
13	P-EN	Practical enact
14	P-RP	Practical Role play
15	P-MOD	Practical Model
16	P-POS	Practical Poster
17	P-CASE	Practical Case taking
18	P-ID	Practical identification
19	P-PS	Practical Problem solving
20	QZ	Quiz
21	PUZ	Puzzles
22	CL-PR	Class Presentation,
23	DEB	Debate
24	WP	Word puzzle
25	O-QZ	Online quiz

26	O-GAME	Online game-based assessment
27	M-MOD	Making of Model
28	M-CHT	Making of Charts
29	M-POS	Making of Posters
30	C-INT	Conducting interview
31	INT	Interactions
32	CR-RED	Critical reading papers
33	CR-W	Creativity Writing
34	C-VC	Clinical video cases,
35	SP	Simulated patients
36	PM	Patient management problems
37	CHK	Checklists
38	OSCE	OSCE
39	OSPE	OSPE,
40	Mini-CEX	Mini-CEX
41	DOPS	DOPS
42	CWS	CWS
43	RS	Rating scales
44	RK	Record keeping
45	COM	Compilations
46	Portfolios	Portfolios
47	Log book	Log book
48	TR	Trainers report
49	SA	Self-assessment
50	PA	Peer assessment
51	360D	360-degree evaluation
52	TT-Theory	Theory
53	PP-Practical	Practical
54	VV-Viva	Viva

Domain

S.No	Short form	Discription
1	CK	Cognitive/Knowledge
2	CC	Cognitive/Comprehension
3	CAP	Cognitive/Application
4	CAN	Cognitive/Analysis
5	CS	Cognitive/Synthesis
6	CE	Cognitive/Evaluation
7	PSY-SET	Psychomotor/Set
8	PSY-GUD	Psychomotor/Guided response
9	PSY-MEC	Psychomotor/Mechanism
10	PSY-ADT	Psychomotor Adaptation
11	PSY-ORG	Psychomotor/Origination
12	AFT-REC	Affective/ Receiving
13	AFT-RES	Affective/Responding
14	AFT-VAL	Affective/Valuing
15	AFT-SET	Affective/Organization
16	AFT-CHR	Affective/ characterization

T L method

S.No	Short form	Discription
1	L	Lecture
2	L&PPT	Lecture with Power point presentation
3	L&GD	Lecture & Group Discussion
4	L_VC	Lecture with Video clips
5	DIS	Discussions
6	BS	Brainstorming
7	IBL	Inquiry-Based Learning
8	PBL	PBL
9	CBL	CBL
10	PrBL	Project-Based Learning
11	TBL	TBL
12	TPW	Team project work
13	FC	Flipped classroom
14	BL	Blended Learning
15	EDU	Edutainment
16	ML	Mobile learning
17	ECE	ECE
18	SIM	Simulation
19	RP	Role plays
20	SDL	Self-directed learning
21	PSM	Problem solving method
22	KL	Kinesthetic Learning
23	W	Workshops
24	GBL	Game-Based Learning
25	D-M	Demo on Model

26	LS	Library Session
27	PL	Peer learning
28	RLE	Real life experience
29	REC	Recitation
30	SY	Symposium
31	TUT	Tutorial
32	PER	Presentations
33	PT	Practical
34	XRay	X ray identification
35	CD	Case diagnosis
36	LRI	Lab report interpretation
37	DA	Drug analysis
38	D	Demonstration
39	D_BED	Demonstration bedside
40	D_L	Demonstration Lab
41	DG	Demonstration Garden
42	FV	Field visit
43	PRA	Practical

(Name of the College)

(Approved by –National Commission for Indian System of Medicines, New Delhi &

Name of the University)

Name of the department

Batch- _____

Certificate

This is to certify that, Mr. / Ms. _____, Enrollment Number- _____ has satisfactorily completed the course of Practicals in (Subject Name) prescribed by the (Name of University) as a part of the Second Professional B.A.M.S. Course.

Examination Seat No.: _____

Date of Examination- _____

Sign. Of Internal Examiner-_____

Sign. Of External Examiner-_____

Sign. of Teacher

Sign. of H.O.D.

RASASHASTRA & BHAISHAJYA KALPANA

(AYURVEDA PHARMACEUTICS AND CLINICAL PHARMACOLOGY)

AyUG-RB Practical Format

Name of the Practical: **Serial No:**

Reference with verse: **Date of commencement:**

Date of completion:

Process/Principle:

Aim:

Equipments:

Ingredients:

S.N.	Name of raw drugs	Part used	Quantity	S.N	Name of raw drugs	Part used	Quantity
1.				5.			
2.				6			
3.				7			
4.				8			

Media used:

Method of preparation:

Pre-operative (Purva karma):

1.

2.

Operative (Pradhan karma):

1.

2.

3.

4.

Post Operative (Pascchat Karma):

1. .
2. .
3.

Observation:

1. **.**
2. **.**
3. **.**
4. **.**

Confirmative test /Chief Desired Character:

1. **.**
2. **.**

Precautions:

1. .
2.
3.

Results:

Organoleptic test: *Shabda* – *Sparsha* – *Rupa* – *Rasa* – *Gandha* –	Total duration required: Initial weight: Final weight: Loss / Gain in weight: Reason for loss/gain in weight:
Guna – *Virya* – ------ *Vipaka* – ------- *Karma* – ------	Uses: Pharmaceutical: Therapeutic: Dose: Anupana: Shelf life*:*

Discussion:

Diagram : on the back page

Signature of the student Signature of the supervisor

Name & details of College/ Institute / University

PHARMACY VISIT REPORT

Name of Pharmacy : …….

Address : …….

Date of visit : ……

Duration (hours) : …….....

OBSERVATIONS

A. Establishment, Certification and Market

Year of Establishment : …….

Certification type : …….

Licensed for : …….

Number of licensed drugs : …….

Turn over : …… per year

B. Product

Number of classical formulations : …….

Number of proprietary formulations : …….

Name of frequently Manufacturing/ Sale drug (s) : …….

Table 01: Name of five products with details of their use:

Sr. No.	Name of Product	Type of dosage form	Category	Uses
1				
2				
3				
4				
5				

C. Quality Control Laboratory

In-house Quality Control Laboratory facility : …….

Table 02: Name and utility of any five Instruments/ Equipment available in Lab:

Sr. No.	Name of Instruments/ Equipment	Utility
1.		
2.		
3.		
4.		
5.		

D. **Premises**

Number and name of sections in premises : …….

Additional subsections, if any : …….

Restricted Manufacturing Area (s) : …….

Flow chart of pharmacy premises during visit :

Any other points need to report : ……...

Name & Signature of student **Name & Signature of teacher**

SAME PHARMACY REVISIT REPORT(2nd/3rd…)

Format for revisit report posted in different units of previously visited or in-house pharmacy.

Name of Pharmacy : …….

Address : …….

Date of visit : ……

Duration (hours) : …….....

Visit Number : ……

Name of section posted (last visit) : ……

Name of section posted (recent/present visit): ……

Table: Mention the details of formulations which are you like most:

Sr. No.	**Name of Product**	**Type of dosage form**	**Category**	**Uses**
1				
2				
3				
4				
5				

	Manufacturing unit		**Quality Control (QC**	
Sr. No.	**Name of Product**	**Instrument/ Equipment used in preparation**	**QC parameters**	**Instrument/ Equipment used in QC**
1				
2				
3				
4				
5				

Any other points to report : ……...

Name & Signature of student **Name & Signature of teacher**

Hospital IPD Visit Practical Format

Note;

- Patients name, consultants name not to be written or mentioned.
- No comments on consultant's prescription.
- Discussion and conclusion should be purely based on textual reference and research updates
- Five to ten case sheet formulations are to be recorded

Diagnosis/complaints of the patient: **Serial No:**

Date of admission:

Date of Discharge:

Need /Principle of Practical:

Aim:

Details of Medicines Prescribed by the consultant

1.

2.

3.

4.

5.

1. Name of the formulation:

Matra:

Anupana:

Kalamaryada(Duration of medication as per text as applicable):

Sl No	Name of ingredient	Rasa	Guna	Virya	Vipaka	Doshagnata	Rogagnata
1							
2							
3							
4							
5							
6							

2.Name of the formulation:

Matra:

Anupana:

Kalamaryada (Duration of medication as per text as applicable):

Sl No	Name of ingredient	Rasa	Guna	Virya	Vipaka	Doshagnata	Rogagnata
1							
2							
3							
4							
5							
6							

Note: Based on no of formulations above tables may be inserted

Discussion:

Conclusion:

Sign of Student **Sign of Teacher**

Analytical Practical/QC Lab

Name of the Practical:

Objective:

Reference:

Apparatus:

Chemicals:

Sl.No.	Chemicals	Quantity

Sample (Formulation/raw drug):

Raw drug / Formulation:

Weight:

Description: Solid dosage / liquid dosage / semisolid form

Principle:

Procedure:

Precaution:

Observation:

Calculations:

Result:

Utility:

Signature of student **Signature of faculty**

RASASHASTRA & BHAISHAJYA KALPANA NON-LECTURE ACTIVITY BOOK

NAME OF THE INSTITUTE

WITH LOGO

RASASHASTRA & BHAISHAJYA KALPANA

(AYURVEDA PHARMACEUTICS AND CLINICAL PHARMACOLOGY)

Name of the student:……

Registration number:……..

Academic year:……

University:……

STUDENT UNDERTAKING

I……., hereby declare that I have completed the Ayurvediya aushadhi nirmana vigyana and Ayurvediya aushadhi prayoga vigyana practical cum Activity Book voluntarily and to the best of my abilities. I understand that this activity book is intended to supplement my Ayurveda medical education and enhance my understanding of the various concepts and skills related to the field of Ayurveda medicine.

By undertaking this activity book, I acknowledge that:

1. *I have actively engaged in the activities, exercises, and challenges presented in the Ayurvediya aushadhi nirmana vigyana and Ayurvediya aushadhi prayoga vigyana practicals cum Activity Book.*
2. *I have devoted the necessary time and effort to comprehend and apply the knowledge gained from the activity book.*
3. *I have sought to expand my understanding of medical concepts and develop my critical thinking skills through the completion of the activity book.*
4. *I have taken personal responsibility for my learning and have independently pursued additional resources and references to enhance my understanding of the topics covered in the activity book.*
5. *I recognize that the completion of this activity book does not substitute for formal Ayurveda medical education or professional training. It serves as a complementary resource to further my knowledge and skills.*
6. *I will utilize the knowledge and skills gained from this Ayurvediya aushadhi nirmana vigyana and Ayurvediya aushadhi prayoga vigyana practicals cum Activity Book responsibly and ethically, prioritizing patient care, safety, and the well-being of individuals.*
7. *I understand that the Ayurvediya aushadhi nirmana vigyana and Ayurvediya aushadhi prayoga vigyana practical cum Activity Book does not confer any official medical qualification or certification upon completion. It serves as a personal accomplishment and a testament to my commitment to continuous learning and professional growth.*

By signing this self-undertaking, I affirm my dedication to lifelong learning and the pursuit of excellence in the medical field. I accept full responsibility for the completion of the Ayurvediya aushadhi nirmana vigyana and Ayurvediya aushadhi prayoga vigyana practical cum Activity Book and the utilization of the knowledge gained from it.

Student signature: _____

Date: _____

RASASHASTRA & BHAISHAJYA KALPANA

(AYURVEDA PHARMACEUTICS AND CLINICAL PHARMACOLOGY)

AyUG-RB - NON LECTURE ACTVITY FORMAT

Name of the Non Lecture Activity : **Serial No:**

Date of commencement: **Date of completion:**

Aim/ Objectives of the activity:

Method of Activity:

In Group Activity your role/ task done:

Discussion & Coclusion:

Diagram: Draw Schematic diagram if applicable

Note: As per activity any addition/ deletion/ Modification needed may be allowed

Signature of the student Signature of the supervisor

MARKET SURVEY FORM (NLM Activity)
For Herbal / Herbo mineral formulations
Department of Rasa Shastra Evum Bhaishajya Kalpana

Institute…
Student's Name :
Roll No :
Group No / Name :
Term : I / II / III
Market Place :
Medical / Ayu Store's Name :
Survey for / Formulation Name :

Sr. No	Survey Point	Observation	Observation
1	Manufacturer / Pharmacy Name(if more manufacturers more columns can be added)		
2	Reference Book		
3	Packing size / Net Content		
4	Packing material (Plastic/Glass/Blister)		
5	Colour of product		
6	Form of product (Tab./Pill/Powder etc.)		
7	M.R.P.		
8	Mfg. Date		
9	Expiry Date		
10	Mfg. Batch No		
11	Dose & Indication		
12	Precautions if any		
13	Total sale/ quantity manufactured in last financial year		

Note: If Multiple companies are manufacturing & sold in the market insert more columns for observation

Discussion:

Conclusion:

Student's Sign : Teacher's Sign :

Course curriculum for Second Professional BAMS

(PRESCRIBED BY NCISM)



Roga Nidan evam Vikriti Vigyan

(SUBJECT CODE : AyUG-RN)

(Applicable from 2021-22 batch, from the academic year 2023-24 onwards for 5 years or until further notification by NCISM, whichever is earlier)

ncism

।। आयुषे सर्वलोकानाम् ।।

BOARD OF AYURVEDA
NATIONAL COMMISSION FOR INDIAN SYSTEM OF MEDICINE
NEW DELHI-110058

भारतीय चिकित्सा पद्धति राष्ट्रीय आयोग
आयुष मंत्रालय, भारत सरकार
कार्यालय: टी–19, पहली और दूसरी मंजिल, ब्लॉक–IV, धन्वन्तरि भवन,
मार्ग नंबर– 66, पंजाबी बाग (पश्चिम), नई दिल्ली–110026
National Commission for Indian System of Medicine
Ministry of AYUSH, Govt. of India
Office: T-19, 1st & 2nd Floor, Block-IV, Dhanwantari Bhawan,
Road No.- 66, Punjabi Bagh (West), New Delhi-110026
ncism
॥ आयुषे सर्वलोकानाम् ॥
देश का प्रकृति परीक्षण अभियान
दूरभाष/Phone: सभापति /Chairman: 25221001, सचिव/Secretary: 25221006, कार्यालय /Office: 25221002/3, पंजीयन /Registration: 25221004,
वेबसाईट/Web Site: www.ncismindia.org, ईमेल /Email ID: secretary@ncismindia.org

क्रमांक/ Ref. No BOA/Syllabus/31/2/2024 **दिनांक/Dated. 01.01.2025**

To,

The Registrars of the universities having Ayurveda colleges
Directors/ Deans/Principals of all Ayurveda colleges

Subject: - Information about Changes/Corrections in the 2nd Professional Syllabus of – Rognidana Vikruti vigyan, Swasthvritta & Yoga, and Dravyaguna Subjects- reg.

Dear Sir/Madam,

With reference to the subject mentioned above, you are hereby informed to implement the corrections in the below mentioned curriculum for the Second Professional BAMS subjects:

- **Roga Nidan evam Vikriti Vigyan**
- **Swasthavritta evam Yoga**
- **Dravyaguna Vigyan**

Kindly circulate the same to the concerned for implementation.

Enclosure: - As above

Dr. B.S Prasad
President, BOA, NCISM

डॉ. श्रीनिवास प्रसाद बडकु
Dr. Srinivasa Prasad Badaru
अध्यक्ष, आयुर्वेद बोर्ड
President, Board of Ayurveda
भारतीय चिकित्सा पद्धति राष्ट्रीय आयोग
National Commission for Indian System of Medicine
पंजाबी बाग (पश्चिम), नई दिल्ली-110026
Punjabi Bagh (West), New Delhi-110026

Copy to: -

1. Chairperson, National Commission for Indian System of Medicine, New Delhi-110026.
2. Guard file.

Dr. B.S Prasad
President, BOA, NCISM

Corrigendum

COURSE CURRICULUM FOR SECOND PROFESSIONAL BAMS
(PRESCRIBED BY NCISM)

Roga Nidan evam Vikriti Vigyan

(SUBJECT CODE: AyUG -RN)

Corrections for implementation:

Apply the corrections as detailed below					
Page no.	**Table no.**	**Sr. no.**	**Point no.**	**Existing Text**	**Corrected Text**
11	**2**	**88**	**60**	LH and NLH column are blank	LH – 1 Hr NLH – 2 Hr
90	**6F**	**88**	**60**	MCQ SAQ LAQ Column is blank	MCQ – Yes SAQ – Yes LAQ - No
88	**6F**	**52**	**24**	MCQ column mentioned as NO	MCQ - Yes
		54	**26**		
		55	**27**		
		57	**29**		
		58	**30**		
		59	**31**		
		60	**32**		

- **Replace table 6 G with the below mentioned table-**

Corrected Table- 6G (Blue Print of Paper I & II)

PAPER 1			
Type of Question	**Sr. No.**	**Syllabus point as per Table- 6F**	**Title of the Topic**
Multiple choice Questions 20 Questions 1 Mark each All compulsory	1.	2.	Pareeksha
	2.	5.	Upashaya/ Anupashaya
	3.	6.	Dosha vikruti
	4.		
	5.	7.	Doshagati & Rogamarga
	6.	8.	Sroto dushti
	7.	9.	Concept of Ama
	8.	10.	Assessment of Ama
	9.	12.	Dushya dushti
	10.	14.	Rupa
	11.	15.	Vyadhinamakarana
	12.	16.	Vyadhi
		27.	Sadhyasadhyata
	13.	17.	Ashtanindita (Endocrine disorders)
	14.	18.	Janapadodhwamsa vikara (Pandemic disorders)
		19.	Nidanarthakara Vyadhi, Vyadhisankara
	15.	20.	Vyadhikshamatva
	16.	21.	Rogi bala Pareeksha
	17.	22.	Dhatu Paka,
		24.	Upadrava

Corrigendum

	18.	23.	Infection and Nutritional disorders;
		26.	Vyadhibala pareeksha
	19.	25.	Arishta
	20.	28.	Digital health & Artificial intelligence in the context of Roganidana
Short Answers Questions Eight Questions 5 Marks Each All Compulsory	1.	1.	Roga nidana – Pathophysiology and clinical diagnosis;;
		2.	Pareeksha
		3.	Methods of Rogi pareeksha;
		4.	Sapeksha nidana – Vyavachedaka nidana
	2.	5.	Upashaya/ Anupashaya
		6.	Dosha vikriti
		7.	Doshagati and Rogamarga
	3.	8.	Srotodushti
		9.	Concept of Ama
		10.	Assessment of Ama
	4.	11.	Sthana samshraya – poorvaroopa
		12.	Dushya dushti
	5.	13.	Samprapti
		14.	Rupa
	6.	16.	Vyadhi
		20.	Vyadhikshamatva
		27.	Sadhyasadhyata – Prognosis
	7.	22.	Dhatu Paka
		15.	Vyadhinamakarana
		21.	Rogi bala Pareeksha
		26.	Vyadhi bala Pareeksha
	8.	17.	Ashtanindita (Endocrine disorders)
		18.	Janapadodhwamsa vikara (Pandemic disorders)
		19.	Nidanarthakara Vyadhi ; Vyadhisankara
Long Answer Questions Four Question 10 marks each All compulsory	1.	2.	Pareeksha;
		3.	Methods of Rogi pareeksha;
		4.	Sapeksha nidana – Vyavachedaka nidana
	2.	6.	Dosha vikriti;
		7.	Doshagati and Rogamarga;
		8.	Srotodushti
		9.	Concept of Ama
	3.	11.	Sthana samshraya – poorvaroopa
		12.	Dushya dushti
		13.	Samprapti
		14.	Rupa
	4.	16.	Vyadhi
		20.	Vyadhikshamatva
		22.	Dhatu Paka

PAPER 2			
Multiple choice Questions 20 Questions 1 Mark each All compulsory	1.	1.	Agnimandya – Ajeerna, Anaha, Adhmana, Atopa
	2.	3.	Amlapitta
	3.	4.	Shoola
	4.	5.	Atisara, and Pravahika
	5.	7.	Visuchika, Alasaka, Vilambika

Corrigendum

	6.	9.	Mutrakrichhra
	7.	10.	Mutraghata
	8.	13.	Shwasa
	9.	14.	Kasa
	10.	17.	Jwara
	11.	18.	Masurika - Romantika
	12.	21.	Raktapitta,
		24.	Shotha
	13.	26.	Kamala,
		27.	Udara Roga
	14.	29.	Kushtha - Maha Kushtha & Kshudra Kushtha (According to Charaka)
		31.	Shwitra
	15.	30.	Sheetapitta,
		32.	Visarpa
	16.	2.	Chhardi
		8.	Common GIT diseases
		11.	Common Urinary diseases
		37.	Obesity
		44.	Diseases of bone, joints and muscles;
		57.	Clinical presentation of common parasitic disorders
	17.	15.	Rajayakshma & Shosha
		16.	Common lung disorders
		19.	Fever
		39.	Diabetes mellitus & Pancreatitis
		47.	Immunological & metabolic disorders;
		60.	Tuberculosis
	18.	22.	Hematopoietic diseases
		23.	Hridroga
		25.	Cardiovascular disorders
		28.	Hepatobiliary diseases
		33.	Skin diseases
		35.	Thyroid disorders
		42.	Common neurological & spine diseases
	19.	48.	Klaibya & Vandhyatva
		49.	Sexual dysfunction and Infertility
		50.	Unmada & Apasmara
		51.	Vishada
		52.	Murchha and Sanyasa
		53.	Common Psychiatric diseases
	20.	54.	Phiranga and Upadamsha
		55.	Syphilis & Gonorrhoea
		56.	Krimiroga
		58.	Khalitya & Palitya
		59.	Shleepada
		34.	Galaganda

Corrigendum

Short Answers Questions Eight Questions 5 Marks Each All Compulsory	1.	1.	Agnimandya – Ajeerna, Anaha, Adhmana, Atopa
		3.	Amlapitta
		4.	Shoola
		5.	Atisara and Pravahika
		6.	Grahani
		7.	Visuchika, Alasaka, Vilambika
		9.	Mutrakrichhra
		10.	Mutraghata
	2.	13.	Shwasa
		14.	Kasa
		17.	Jwara
		20.	Pandu
	3.	21.	Raktapitta
		24.	Shotha
		26.	Kamala
		27.	Udara
	4.	29.	Kushtha - Maha Kushtha & Kshudra Kushtha (According to Charaka)
		30.	Sheetapitta
		31.	Shwitra
		32.	Visarpa
	5.	36.	Sthoulya karshya
		38.	Prameha
	6.	40.	Vatavyadhi
		41.	Snayugata vata
		43.	Sandhigatavata and Asthi majja gata vata
	7.	45.	Amavata
		46.	Vatarakta
	8.	37.	Obesity
		39.	Diabetes Mellitus and Pancreatitis
		42.	Common neurologic and spine disorders
		44.	Diseases of bone, joints, and muscles
		47.	Immunological & Metabolic disorders
		57.	Clinical presentation of common parasitic disorders
		60.	Tuberculosis
		2.	Chhardi
		8.	Common GIT Diseases
		11.	Common Urinary Diseases
		15.	Rajayakshma & Shosha
		16.	Common Lung Disorders
		19.	Fever
		22.	Hemopoietic Diseases

Corrigendum

		23.	Hridroga
		25.	Cardiovascular disorders
		28.	Hepatobiliary diseases
		33.	Skin diseases
		35.	Thyroid disorders
Long Answer Questions Four Question 10 marks each All compulsory	1.	1.	Agnimandya – Ajeerna, Anaha, Adhmana, Atopa
		4.	Shoola
		5.	Atisara and Pravahika
		6.	Grahani
		24.	Shotha
	2.	13.	Shwasa
		14.	Kasa
		17.	Jwara
		20.	Pandu
		36.	Sthoulya karshya
	3.	21.	Raktapitta
		26.	Kamala
		27.	Udara roga
		29.	Kushtha - Maha Kushtha & Kshudra Kushtha (According to Charaka)
		30.	Sheetapitta
		31.	Shwitra
		32.	Visarpa
	4.	38.	Prameha
		40.	Vatavyadhi
		41.	Snayugata vata
		43.	Sandhigatavata and Asthi majja gata vata;
		45.	Amavata
		46.	Vatarakta

Read the Corrected Terminology/Text as applicable:

Existing Text	Corrected Text
Ulcerative dyspepsia and Non-ulcerative dyspepsia	Ulcer Dyspepsia and Non-ulcer Dyspepsia (NUD)
Alcoholic and Non-Alcoholic Liver Disease	Alcoholic Liver Diseases and Non-Alcoholic Fatty Liver Disease (NAFLD)
Lumbago-Sciatica syndrome	Lumbago, Sciatica
SLE	Systemic Lupus Erythematosus (SLE)

Corrigendum

II Professional Ayurvedacharya (BAMS)

Subject Code : AyUG-RN

Summary

Total number of Teaching hours: 450			
Lecture hours(LH)-Theory		150	150(LH)
Paper I	60		
Paper II	90		
Non Lecture hours(NLH)-Theory		300	300(NLH)
Paper I & II	90		
Non Lecture hours(NLH)-Practical			
Paper I & II	210		

Examination (Papers & Mark Distribution)					
Item	**Theory Component Marks**	**Practical Component Marks**			
		Practical	**Viva**	**Elective**	**IA**
Paper I	100	100	70	-	30
Paper II	100				
Sub-Total	200	200			
Total marks	400				

Important Note:-The User Manual II BAMS is a valuable resource that provides comprehensive details about the curriculum file. It will help you understand and implement the curriculum. Please read the User Manual II before reading this curriculum file. The curriculum file has been thoroughly reviewed and verified for accuracy. However, if you find any discrepancies, please note that the contents related to the MSE should be considered authentic.
In case of difficulty and questions regarding curriculum write to cur.imp@ncismindia.org

PREFACE

Roganidan Evum Vikriti Vigyan is a subject that gives emphasis on Ayurveda and contemporary Diagnostics and Pathology. It is a key subject that trains the students to apply knowledge of fundamental principles of Ayurveda to practice by understanding diseases, patient interaction, drawing diagnosis, and prognosis. This is a strong base to frame an appropriate treatment protocol.

The curriculum is framed with a vision for developing the diagnostic knowledge and skills of a student abiding by a patient-centric education. Activty-based training has been inculcated throughout the curriculum to improve the dexterity of a student in handling real-life scenarios in the journey of reaching a diagnosis. The anatomy and physiology learned in an apparently healthy individual from the first professional year is continued in the second professional year with knowledge regarding morbid reflections in the mind and body through this subject.

The sequence of knitting the points in theory and practical are carefully executed to maintain rationality and continuity in learning from a clinical perspective. The basic principles of Vikriti vigyan and their application in Roga nidana, Vyadhi vigyana and clinical diagnostics supported by contemporary diagnostics are the core areas of the curriculum. The essential areas from contemporary pathology and diagnostics are included with the objective to receive interdisciplinary integrated teaching. Some of the topics are defined for horizontal & vertical integration for better understanding.

Innovative teaching learning and assessment methods are introduced. These will develop an interest in students, making the curriculum student and patient-centric and will help to develop competencies, skills, attitudes, and communication as these are indispensable components of the learning process in Health care/ Medicine.

In addition to classroom teaching-learning, the dedicated time has been allotted to clinical activities, self-directed learning, group learning, survey to identify specific illnesses, CBL, and PBL, which are aligned with traditional and innovative formative assessments and scientific writings; ultimately expecting the improved performance of the students in summative assessments and as a successful practitioner in future by implementing Competency-Based Medical Education. The subject will be definitely helpful to the students to create a justifiable diagnosis for future treatment plans which is the basic need for successful practice.

INDEX

Course Code and Name of Course 5
Table 1- Course learning outcomes and matched PO 5
Table 2 : Contents of Course 6
Paper 1 6
Paper 2 8
Table 3: Learning objectives (Theory) of Course 12
Paper 1 12
Paper 2 29
List of Practicals 58
Table 4: Learning objectives (Practical) 59
Practical 1 59
Table 4a: List of Practical 66
Activity 67
Table 5- Teaching learning method 80
Table 6: Assessment Summary: Assessment is subdivided in A to H points 81
6 A-Number of Papers and Marks Distribution 81
6 B - Scheme of Assessment (formative and Summative) 82
6 C - Calculation Method for Internal assessment Marks 83
6 D - Evaluation Methods for Periodical Assessment 83
6 E Question Paper Pattern 84
6 F Distribution of theory examination 85
Paper 1 85
Paper 2 86
6 G Blue print of paper I & II 91
6 H Distribution of Practical Exam 94
References Books/ Resources 99
Abbreviations 103

Course Code and Name of Course

Course code	Name of Course
AyUG-RN	Roga Nidan evam Vikriti Vigyan

Table 1- Course learning outcomes and matched PO

SR1 CO No	A1 Course learning Outcomes (CO) AyUG-RN At the end of the course AyUG-RN, the students should be able to-	B1 Course learning Outcomes matched with program learning outcomes.
CO1	Identify the morbidities in accordance with principles of Ayurveda pathology (vikriti vigyan siddhanta)	PO1
CO2	Describe the basic, general, and systemic pathological process thereby applying it in reaching a diagnosis	PO2,PO3
CO3	Perform appropriate clinical examination (pareeksha) utilizing Ayurveda and contemporary principles (samakalina siddhanta)	PO2,PO3,PO4
CO4	Order and interpret various diagnostic laboratory investigations and imaging	PO2,PO3
CO5	Diagnose and present the case with clinical reasoning (naidanika tarka)	PO5
CO6	Follow and advise advancements in diagnosis (vyadhi vinischaya) and prognosis (sadhya asadhyata) in clinical practice (naidanika adhyayana)	PO7
CO7	Communicate effectively with the patient (rugna), relatives (bandhujan) and other stakeholders (anya hita dhaaraka)	PO8
CO8	Demonstrate ethics (sadvritta), compassion (karuna) and possess qualities of a clinician (vaidya guna)	PO6,PO9

Table 2 : Contents of Course

Paper 1 Fundamental Principles of Vikriti Vigyan					
Sr. No	**A2 List of Topics**	**B2 Term**	**C2 Marks**	**D2 Lecture hours**	**E2 Non-Lecture hours**
1	**1. Roga nidana – Pathophysiology and clinical diagnosis**	1	43	1	0
2	**2. Pareeksha** Roga and Rogi Pareeksha	1		1	0
3	**3. Methods of Rogi pareeksha**	1		4	3
4	**4. Sapeksha nidana - Vyavacchedaka nidana** Sapeksha nidana - Vyavacchedaka nidana of Ukta/Anukta vyadhi: Methods of differential diagnosis	1		1	0
5	**5. Upashaya/ Anupashaya**	1		1	0
6	**6. Dosha Vikriti** A. Nidana (Vyadhi janaka hetu) B. Agni bheda and Vikriti C. Dosha Vriddhi, Kshaya and Dushta Karma, Ashyapakarsha, Avarana, Samsargaja, Sannipataja. D. Dosha swabhava - Nityasamshleshita (Leena) dosha and Paricchedita dosha E. Paridhavamana dosha	1		3	2
7	**7. Doshagati and Rogamarga**	1		1	0
8	**8. Srotodushti** Samanya sroto dusti nidana and lakshana	1		1	0
9	**9. Concept of Ama** A. Samanya nidana, and Samanya lakshana B. Bheda (Anna rasa. Mala sanchaya (Dhatwagni mandya janit). Dosha dushti)	1		2	0
10	**10. Assessment of Ama** Sama and nirama dosha lakshana, Pureesha lakshana	1		0	1
11	**11. Sthana samshraya – Poorvaroopa**	1	49	1	0
12	**12. Dushya dushti** A. Dhatu and mala vriddhi kshaya lakshana B. Specific Sroto dusti lakshana in relation to Dosha, Upadhatu, Mala, Indriya, Avayava, and Mana dushti lakshana	1		9	9
13	**13. Samprapti** A. Samprapti bheda B. Vyadhi janma and Vyadhi janya	1		1	0

14	**14. Rupa** Pratyatma/ Samanya/ Vishishta Rupa	1		1	0
15	**15. Vyadhinamakarana**	1		1	1
16	**16. Vyadhi** A. Definition, B. Classification – Dwividha/ Trividha/ Chaturvidha/ Saptavidha (Adibala/ Sahaja - Genetic, Janmabala/ Garbhaja - Congenital, Dosha bala/ Jataja - Acquired, Sanghatabala/ Peedaja - Traumatic, Daivabala/ Prabhavaja - Iatrogenic, Kalabala/ Kalaja – Environmental and Geriatric, Swabhava balapravrutta), etc.	1		4	0
17	**17. Ashtanindita (Endocrine disorders)**	1		1	0
18	**18. Janapadodhwamsa vikara (Pandemic disorders)**	1		1	0
19	**19. Nidanarthakara Vyadhi, Vyadhisankara**	1		1	0
20	**20. Vyadhikshamatva** A. Vikaravighata Bhava & Abhava, SatmyaB. Ojus - Bheda – Two types and Four types C. Dosha Paka D. ImmunityE. Healing/repair	1		2	0
21	**21. Rogi bala Pareeksha**	1		2	1
22	**22. Dhatu Paka** A. Dhatu pakaB. Ojodusti lakshana C. Asatmya - Immune pathologyD. Cell Injury and Cellular adaptations E. Inflammation F. Haemodynamic disorders G. Neoplasia	1		12	1
23	**23. Infection and Nutritional disorders**	1	8	4	1
24	**24. Upadrava**	2		1	0
25	**25. Arishta**	2		1	0
26	**26. Vyadhi bala pareeksha**	2		1	0
27	**27. Sadhyasadhyatva – Prognosis**	2		1	0
28	**28. Digital health and Artificial intelligence in the context of Roganidana**	2		1	1

Total Marks	**100**	**60 hr**	**20 hr**

Paper 2 Vyadhi Vigyan, contemporary understanding and updates					
Sr. No	**A2 List of Topics**	**B2 Term**	**C2 Marks**	**D2 Lecture hours**	**E2 Non-Lecture hours**
29	**1. Agnimandya – Ajeerna, Anaha, Adhmana, Atopa**	2	43	1	0
30	**2. Chhardi**	2		1	0
31	**3. Amlapitta**	2		2	0
32	**4. Shoola** Parinama Shoola, Annadrava Shoola	2		1	0
33	**5. Atisara, and Pravahika**	2		3	1
34	**6. Grahani**	2		2	1
35	**7. Visuchika, Alasaka, Vilambika**	2		1	0
36	**8. Common GIT diseases** Ulcerative dyspepsia and Non-ulcerative dyspepsia, Irritable Bowel Syndrome, Inflammatory Bowel Diseases	2		1	4
37	**9. Mutrakrichhra**	2		2	1
38	**10. Mutraghata**	2		3	1
39	**11. Common Urinary diseases** Urinary Tract Infection, Prostatomegaly, Nephrotic syndrome, Nephritic syndrome, Acute Kidney Injury and Chronic Kidney Disease	2		1	6
40	**12. Hikka**	2		1	0
41	**13. Shwasa**	2		2	1
42	**14. Kasa**	2		2	0

43	**15. Rajayakshma & Shosha**	2		3	0
44	**16. Common lung disorders** Pneumonia, Chronic Obstructive Pulmonary Disease, Pleural effusion, Bronchiectasis	2		1	4
45	**17. Jwara** Jwarabheda - Doshaja and Agantuja (Abhishanga jwara), Vishama Jwara, Punaravartaka Jwara, Jwara avastha - Ama, Pachyamana and Nirama Jwara	2		4	1
46	**18. Masurika – Romantika**	2		1	0
47	**19. Fever** A. General mechanism of Fever. B. Introduction to Eruptive fevers - Measles, Chicken pox, Rubella, Hand foot mouth disease, Herpes zoster C. Parasitic fevers – Filariasis, Malaria, D. Detailed description of Common infective fevers – Typhoid, Dengue, Influenza, Chikungunya, E. Common regional disorders presenting with fever	2		1	6
48	**20. Pandu**	2		2	0
49	**21. Raktapitta**	2	25	1	1
50	**22. Hematopoietic diseases** Anaemia, Nutritional anaemia, Thalassemia, Sickle cell Anaemia, Leukaemia, Thrombocytopenia	2		1	6
51	**23. Hridroga**	2		1	1
52	**24. Shotha**	2		2	0
53	**25. Cardiovascular disorders** Coronary Artery Disease (Ischemic Heart Disease, and Myocardial Infarction) and Congestive cardiac failure	2		1	5
54	**26. Kamala**	2		2	0
55	**27. Udara Roga**	2		2	1
56	**28. Hepatobiliary diseases** Liver cirrhosis, Alcoholic and Non - Alcoholic Liver Disease, Hepatitis, Jaundice and Ascites	2		1	2
57	**29. Kushtha - Maha Kushtha & Kshudra Kushtha**	3		3	1

	(According to Charaka)				
58	**30. Sheetapitta**	3		1	0
59	**31. Shwitra**	3		1	0
60	**32. Visarpa**	3		2	0
61	**33. Skin diseases** Allergic disorders - Eczema, Urticaria; Squamous lesions - Psoriasis, Lichen planus; Bullous lesion – Pemphigus and Pemphigoid; Mycotic skin diseases; Leprosy; Vitiligo; Cellulitis	3		1	6
62	**34. Galaganda**	3		1	0
63	**35. Thyroid disorders** Hypothyroidism and hyperthyroidism	3		1	1
64	**36. Sthoulya – Karshya**	3	32	1	0
65	**37. Obesity**	3		1	1
66	**38. Prameha**	3		2	1
67	**39. Diabetes Mellitus and Pancreatitis**	3		1	1
68	**40. Vatavyadhi** Samanya nidana, Samanya purvarupa, Samanya lakshana	3		1	0
69	**41. Snayugata vata** Snayugata vata, Akshepaka – Apatanaka; Ardita, Pakshaghata, Kampavata, Gridhrasi, Vishwachi, Pangutwa	3		4	2
70	**42. Common neurologic and spine disorders** Common neurologic diseases: Parkinson’s disease, Stroke, Bell’s Palsy, Motor Neuron Disease, Transverse myelitis, Epilepsy (Organic). Common Spine disorders: Lumbago-Sciatica syndrome, Brachial neuralgia, Cervical and Lumbar Spondylosis	3		2	4
71	**43. Sandhigatavata and Asthi majja gata vata** Sandhigatavata, Katigraha, Manyasthambha, Vatakantaka, Avabahuka, Amsashosha	3		1	0
72	**44. Diseases of bone, joints, and muscles**	3		1	2

	Diseases of bone and Joints - Osteoarthritis, Osteoporosis. Frozen Shoulder, Calcaneal spur/ Plantar fasciitis, Tennis elbow, Carpel tunnel syndrome; Muscular diseases - Muscular Dystrophy					
73	**45. Amavata**	3		2	0	
74	**46. Vatarakta**	3		2	1	
75	**47. Immunological & Metabolic disorders** Rheumatic fever, Rheumatoid arthritis, SLE, Ankylosing spondylitis, Gout	3		1	2	
76	**48. Klaibya & Vandhyatva**	3		1	0	
77	**49. Sexual dysfunction and Infertility**	3		1	1	
78	**50. Unmada & Apasmara**	3		3	0	
79	**51. Vishada**	3		1	0	
80	**52. Murchha, and Sanyasa**	3		1	0	
81	**53. Common Psychiatric diseases** Depression, Anxiety neurosis and Epilepsy (Non-organic)	3		1	0	
82	**54. Phiranga and Upadamsha**	3		1	0	
83	**55. Syphilis & Gonorrhoea**	3		1	1	
84	**56. Krimiroga**	3		1	0	
85	**57. Clinical presentation of common parasitic disorders** Hook worm, Round worm, Thread worm, Pin worm	3		1	2	
86	**58. Khalitya & Palitya**	3		1	0	
87	**59. Shleepada**	3		1	0	
88	**60. Tuberculosis**	3				
Total Marks			**100**	**90 hr**	**70 hr**	

Table 3: Learning objectives (Theory) of Course

Paper 1 Fundamental Principles of Vikriti Vigyan									
A3 Course outcome	**B3** Learning Objective (At the end of the session, the students should be able to)	**C3** Domain/sub	**D3** Must to know / desirable to know / Nice to know	**E3** Level Does/ Shows how/ Knows how/ Know	**F3** T-L method	**G3** Assessment (Refer abbreviations)	**H3** Formative/ summative	**I3** Term	**J3** Integration
Topic 1 1. Roga nidana – Pathophysiology and clinical diagnosis (Lecture :1 hours, Non lecture: 0 hours)									
CO1	Explain the concept of Roganidana	CC	MK	KH	L&PPT	INT	F&S	I	
CO1	Explain the concept of pathophysiology and clinical diagnosis	CC	MK	KH	L&PPT	O-QZ	F&S	I	
Topic 2 2. Pareeksha (Lecture :1 hours, Non lecture: 0 hours)									
CO1	Define and enlist types of pareeksha	CK	MK	K	L&PPT	INT,TT-Theory	F&S	I	
CO1	Describe importance of pareeksha	CC	MK	KH	L&PPT	DEB	F&S	I	
CO1	Explain the concept of rogi pareeksha	CC	MK	KH	L&PPT	INT	F&S	I	
CO1	Enlist rogi pareeksha	CK	MK	K	L&PPT	O-QZ,INT	F&S	I	

CO1	Describe importance of rogi pareeksha	CC	MK	KH	L&GD	DEB	F&S	I	
CO1	Explain the concept of roga pareeksha	CC	MK	KH	L&PPT	INT,TT-Theory	F&S	I	
CO1	Enlist roga pareeksha	CK	MK	K	L&PPT	INT	F&S	I	
CO1	Describe importance of roga pareeksha	CC	MK	KH	L&GD	T-OBT,DEB	F&S	I	
CO1	Differentiate between rogi pareeksha and roga pareeksha	CC	MK	KH	L&GD	T-OBT,M-CHT	F&S	I	
Topic 3 3. Methods of Rogi pareeksha (Lecture :4 hours, Non lecture: 3 hours)									
CO1,CO3,CO7,CO8	Describe Prashna Pareeksha, Chakshu indriyataha Pareeksha, Srotrendriyataha Pareeksha, Sparshanendriyataha Pareeksha, Ghranendriyataha Pareeksha, and Rasanendriyataha Pareeksha with its clinical interpretation	CC	MK	SH	L_VC	COM	F&S	I	
CO1,CO3	Describe the importance, clinical interpretation and methods of eliciting Nadi Pareeksha	CAN	MK	KH	L&GD,D_BED	COM	F&S	I	
CO1	Describe the importance and clinical interpretation of Mutra Pareeksha	CC	MK	KH	L&GD	COM	F&S	I	
CO1	Describe the methods of performing Tailabindu Pareeksha	CC	MK	KH	L_VC	WP,COM	F&S	I	
CO1,CO3	Describe the importance & clinical interpretation of Mala Pareeksha, Jihwa Pareeksha, Shabda Pareeksha, Sparsha Pareeksha, Druk Pareeksha, Akriti Pareeksha	CAN	MK	KH	L&GD,SDL,D_BED	COM	F&S	I	

Topic 4 4. Sapeksha nidana - Vyavacchedaka nidana (Lecture :1 hours, Non lecture: 0 hours)									
CO1,CO2,CO3,CO5	Describe the steps of Vyavacchedaka nidana of Ukta Vyadhi and Anukta vyadhi with suitable examples (Ayurveda and contemporary science incorporating clinical findings and investigations)	CE	MK	KH	L&GD,CBL	T-OBT,M-CHT	F&S	I	V-KC,V-SH,V-SHL,V-SP
CO5	Describe scope of developing screening, triage, confirmation, monitoring and prognostic tools in Ayurveda for Emerging diseases along with recent advancements	CC	DK	KH	L&PPT,IBL	INT	F&S	I	
Topic 5 5. Upashaya/ Anupashaya (Lecture :1 hours, Non lecture: 0 hours)									
CO1	Define Upashaya and enlist synonyms of Upashaya	CK	MK	K	L&PPT	INT	F&S	I	
CO1	Define Anupashaya and enlist synonyms of Anupashaya	CK	MK	K	L&PPT	INT,TT-Theory	F&S	I	
CO1	Enumerate and explain the eighteen types of Upashaya with relevant examples	CC	MK	KH	L&PPT	WP,INT	F&S	I	
Topic 6 6. Dosha Vikriti (Lecture :3 hours, Non lecture: 2 hours)									
CO1	Define Hetu	CK	MK	K	L&PPT	INT,TT-Theory	F&S	I	
CO1	Enlist and define synonyms of Hetu	CK	MK	K	L&PPT	QZ	F&S	I	
CO1	Enumerate and enlist classification of Nidana (Vyadhi janaka and Vyadhi bodhaka)	CK	MK	K	L&PPT	M-CHT	F&S	I	
CO1	Enumerate and describe types of Vyadhi Janaka Hetu	CC	MK	KH	L&PP	INT	F&S	I	

					T,REC				
CO1,CO5	Correlate Vyadhi Janaka Hetu with contemporary examples	CE	MK	KH	CBL, PrBL	CL-PR	F&S	I	
CO1	Describe the Nidana of Agnidushti	CC	MK	KH	L&PPT,REC	T-OBT	F&S	I	
CO1	Enumerate and explain the types and features of Agnidushti	CC	MK	KH	L&PPT	INT	F&S	I	
CO1	Correlate the Nidana of Agnidushti with contemporary examples	CE	MK	KH	L&GD	P-SUR	F&S	I	
CO3,CO8	Perform assessment of Agnidushti in patient	PSY-GUD	MK	SH	D_BED	P-PRF	F&S	I	
CO1	Recite etiologies of Vata, Pitta and Kapha dushta karma	CK	MK	K	REC	P-REC	F&S	I	
CO1,CO5	Apply the knowledge of aetiologies of Vata, Pitta and Kapha dushta karma in correlating with contemporary etiologies	CAP	MK	KH	L&GD,PrBL,TPW	P-SUR	F&S	I	
CO1	Recite dushta karma, kshaya and vriddhi lakshana of Vata, Pitta and Kapha Dosha	CK	MK	K	REC	P-REC	F&S	I	
CO1	Explain Ashayapakarsha of Dosha with suitable examples	CC	MK	KH	L&GD	INT	F&S	I	
CO1	Define Avarana	CK	MK	K	L&PPT	QZ	F&S	I	
CO1	Enlist types of Avarana	CK	MK	K	L&PP	O-GAME	F&S	I	

					T				
CO1	Enlist the 63 combination of Dosha	CC	MK	KH	L&PPT	O-GAME	F&S	I	
CO1	Describe Samsargaja Dosha Dushti	CC	MK	KH	L&PPT	INT	F&S	I	
CO1	Describe Sama Sannipata and Vishama Sannipata dosha	CC	MK	KH	L&PPT	INT	F&S	I	
CO1	Enlist the different stages of Paridhavamana Dosha	CK	MK	K	L&PPT	INT	F&S	I	
CO1	Explain Paridhavamana dosha with types and examples	CC	MK	KH	L&PPT	COM	F&S	I	
CO1	Explain Nityasamshleshita (Leena) dosha and Paricchedita dosha with examples	CC	MK	KH	L&PPT	INT	F&S	I	
Topic 7 7. Doshagati and Rogamarga (Lecture :1 hours, Non lecture: 0 hours)									
CO1	Enumerate and describe Doshagati and its utility in prognosis with relevant examples	CC	MK	KH	L&GD	INT	F&S	I	
CO1	Describe Urdhwa gati, Adho gati, Tiryaga gati, Vriddhi, Kshaya, Sthana, Koshta, Shakha, Sandhi asthi marma with illustrations and examples	CC	MK	KH	L&GD	COM	F&S	I	
CO1	Describe Koshta to Shakhagati of dosha and Shakha to Koshtagati of dosha with illustration	CC	MK	KH	L&GD	COM	F&S	I	
CO1	Enumerate and describe Rogamarga and its utility in prognosis with relevant examples	CC	MK	KH	L&GD	O-QZ	F&S	I	
Topic 8 8. Srotodushti (Lecture :1 hours, Non lecture: 0 hours)									

CO1	Define and enlist Srotas	CK	MK	K	L&PPT	O-QZ	F&S	I	
CO1	Describe the common aetiology for Sroto dushti	CC	MK	KH	L&GD	INT	F&S	I	
CO1	Explain features of Samanya Srotodushti with examples	CC	MK	KH	L&PPT	CL-PR	F&S	I	
Topic 9 9. Concept of Ama (Lecture :2 hours, Non lecture: 0 hours)									
CO1	Describe the different definitions of Ama	CC	MK	KH	L&PPT,REC	P-REC,INT	F&S	I	
CO1	Enlist different types of Ama	CK	MK	K	L&PPT	INT	F&S	I	
CO1	Correlate the different types of Ama with the current science	CE	MK	KH	BS,IBL	COM	F&S	I	
CO1	Describe samanya lakshana of Ama	CC	MK	KH	L&PPT	O-QZ	F&S	I	
CO1	Explain the concept of Ama with reference to Anna rasa, Mala sanchaya and Dosha dushti	CC	MK	KH	L&PPT	T-OBT,COM	F&S	I	
Topic 10 10. Assessment of Ama (Lecture :0 hours, Non lecture: 1 hours)									
CO1	Explain concept of Sama	CC	MK	KH	L&PPT	INT	F&S	I	
CO1	Describe specific features of Sama and Nirama Dosha and Pureesha	CC	MK	KH	L&PPT	O-GAME	F&S	I	
CO5	Identify specific features of Sama dosha, Sama pureesha, Nirama	PSY-	MK	SH	L,D_	P-PRF	F&S	I	

	dosha and Nirama pureesha in patient	GUD			BED				
Topic 11 11. Sthana samshraya – Poorvaroopa (Lecture :1 hours, Non lecture: 0 hours)									
CO1	Define Sthansamshraya	CK	MK	K	L&PPT	INT	F&S	I	
CO1	Define Poorvaroopa and enlist its types	CK	MK	K	L&PPT	QZ	F&S	I	
CO1	Describe the importance of Poorvaroopa	CC	MK	KH	L&GD	DEB	F&S	I	
CO1	Relate Sthanasamshraya with Poorvaroopa	CAP	MK	KH	L&GD	INT	F&S	I	
Topic 12 12. Dushya dushti (Lecture :9 hours, Non lecture: 9 hours)									
CO1	Enlist Dushya	CK	MK	K	L&PPT	QZ	F&S	I	
CO1	Describe specific features of Dhatu and Mala Vriddhi and Kshaya	CC	MK	KH	DIS	T-OBT	F&S	I	
CO1	Describe the specific etiologies of Pranavaha Sroto dushti and identify contemporary etiologies	CS	MK	SH	L&GD,REC	P-REC,INT	F&S	I	
CO1	Describe features of Pranavaha Sroto Dushti in relation to Dosha Kopa	CC	MK	KH	L&PPT,REC	P-REC,INT	F&S	I	
CO1	Describe Pranavaha Sroto Viddha Lakshana	CC	MK	KH	L&PPT	QZ	F&S	I	
CO1	Describe the specific etiologies of Udakavaha Sroto dushti and	CC	MK	KH	L&G	P-SUR	F&S	I	

	identify contemporary etiologies				D,PrBL				
CO1	Describe features of Udakavaha Sroto Dushti in relation to Dosha Kopa	CC	MK	KH	L&PPT	INT	F&S	I	
CO1	Describe Udakavaha Sroto Viddha Lakshana	CC	MK	KH	L&PPT	INT	F&S	I	
CO1	Describe the specific etiologies of Annavaha Sroto dushti and identify contemporary etiologies	CC	MK	KH	L&GD,REC	P-REC,INT	F&S	I	
CO1	Describe features of Annavaha Sroto Dushti in relation to Dosha Kopa	CC	MK	KH	L&GD,REC	P-REC,INT	F&S	I	
CO1	Describe Annavaha Sroto Viddha Lakshana	CC	MK	KH	L&PPT	WP	F&S	I	
CO1	Describe the specific etiologies of Rasavaha Sroto dushti and identify contemporary etiologies	CC	MK	KH	L&GD,PrBL,REC	P-REC,INT	F&S	I	
CO1	Describe features of Rasavaha Sroto Dushti in relation to Dosha Kopa	CC	MK	KH	L&PPT,REC	P-REC,INT	F&S	I	
CO1	Describe Rasavaha Sroto Viddha Lakshana	CC	MK	KH	L&PPT	QZ	F&S	I	
CO1	Describe the specific etiologies of Raktavaha Sroto dushti and identify contemporary etiologies	CC	MK	KH	L&GD,PrBL,RE	P-REC,INT	F&S	I	

					C				
CO1	Describe features of Raktavaha Sroto Dushti in relation to Dosha Kopa	CC	MK	KH	L&GD,REC	P-REC,INT	F&S	I	
CO1	Describe Raktavaha Sroto Viddha Lakshana	CC	MK	KH	L&PPT	INT	F&S	I	
CO1	Describe the specific etiologies of Mamsavaha Sroto dushti and identify contemporary etiologies	CC	MK	KH	L&GD,PrBL,REC	P-REC,INT	F&S	I	
CO1	Describe features of Mamsavaha Sroto Dusti in relation to Dosha Kopa	CC	MK	KH	L&GD,REC	P-REC,INT	F&S	I	
CO1	Describe Mamsavaha Sroto Viddha Lakshana	CC	MK	KH	L&PPT	QZ	F&S	I	
CO1	Describe the specific etiologies of Medovaha Sroto dushti and identify contemporary etiologies	CC	MK	KH	L&GD,PrBL,REC	P-REC,INT	F&S	I	
CO1	Describe features of Medovaha Sroto Dushti in relation to Dosha Kopa	CC	MK	KH	L&GD,REC	P-REC,INT	F&S	I	
CO1	Describe Medovaha Sroto Viddha Lakshana	CC	MK	KH	L&PPT	QZ	F&S	I	
CO1	Describe the specific etiologies of Asthivaha Sroto dushti and identify contemporary etiologies	CC	MK	KH	L&GD,PrB	P-REC,P-SUR	F&S	I	

					L,REC				
CO1	Describe features of Asthivaha Sroto Dushti in relation to Dosha Kopa	CC	MK	KH	L&GD,REC	P-REC,INT	F&S	I	
CO1	Describe the specific etiologies of Majjavaha Sroto dushti and identify contemporary etiologies	CC	MK	KH	L&GD,PrBL,REC	P-REC,INT	F&S	I	
CO1	Describe features of Majjavaha Sroto Dushti in relation to Dosha Kopa	CC	MK	KH	L&GD,REC	P-REC,INT	F&S	I	
CO1	Describe the specific etiologies of Shukravaha Sroto dushti and identify contemporary etiologies	CC	MK	KH	L&GD,PrBL,REC	P-REC,INT	F&S	I	
CO1	Describe features of Shukravaha Sroto Dushti in relation to Dosha Kopa	CC	MK	KH	L&PPT,REC	P-REC,INT	F&S	I	
CO1	Describe Shukravaha Sroto Viddha Lakshana	CC	MK	KH	L&PPT	QZ	F&S	I	
CO1	Describe the specific etiologies of Mutravaha Sroto dushti and identify contemporary etiologies	CC	MK	KH	L&GD,PrBL,REC	P-REC,P-SUR	F&S	I	
CO1	Describe features of Mutravaha Sroto Dushti in relation to Dosha Kopa	CC	MK	KH	L&GD,RE	P-REC,INT	F&S	I	

					C				
CO1	Describe Mutravaha Sroto Viddha Lakshana	CC	MK	KH	L&PPT	QZ	F&S	I	
CO1	Describe the specific etiologies of Pureeshavaha Sroto dushti and identify contemporary etiologies	CC	MK	KH	L&GD,PrBL,REC	P-REC,P-SUR	F&S	I	
CO1	Describe features of Pureeshavaha Sroto Dushti in relation to Dosha Kopa	CC	MK	KH	L&GD,REC	P-REC,INT	F&S	I	
CO1	Describe Pureeshavaha Sroto Viddha Lakshana	CC	MK	KH	L&PPT	QZ	F&S	I	
CO1	Describe the specific etiologies of Swedavaha Sroto dushti and identify contemporary etiologies	CC	MK	KH	L&GD,PrBL,REC	P-REC,P-SUR	F&S	I	
CO1	Describe features of Swedavaha Sroto Dushti in relation to Dosha Kopa	CC	MK	KH	L&GD,REC	P-REC,INT	F&S	I	
CO1	Describe the specific etiologies of Artavavaha Sroto dushti and identify contemporary etiologies	CC	MK	KH	L&GD,PrBL,REC	P-REC,P-SUR	F&S	I	
CO1	Describe features of Artavavaha Sroto Dushti in relation to Dosha Kopa	CC	MK	KH	L&PPT,REC	P-REC,INT	F&S	I	

CO1	Describe Artavavaha Sroto Viddha Lakshana	CC	MK	KH	L&PPT	QZ	F&S	I	
CO1	Describe features of Upadhatu dushti, Mala dushti, Indriya dushti, and Manas dushti	CC	MK	KH	L&GD	INT	F&S	I	
CO1	Describe features of Avayava dusti with relevant examples	CC	MK	KH	L&PPT	INT	F&S	I	
CO5	Identify and interpret the specific Sroto Dushti in the patients	PSY-GUD	MK	SH	SDL	T-CS	F&S	I	
Topic 13 13. Samprapti (Lecture :1 hours, Non lecture: 0 hours)									
CO1	Define Samprapti and enumerate synonyms	CK	MK	K	L&PPT	WP	F&S	I	
CO1	Enlist and describe types of Samprapti with examples	CK	MK	K	L&PPT	INT	F&S	I	
CO1	Describe Vyadhi Janma and Vyadhi Janya Samprapti with examples	CC	MK	KH	L&PPT	INT	F&S	I	
Topic 14 14. Rupa (Lecture :1 hours, Non lecture: 0 hours)									
CO1	Define, enlist and describe different types of Roopa	CC	MK	KH	L&PPT	INT	F&S	I	
CO1	Describe the importance of Roopa	CC	MK	KH	L&GD	DEB	F&S	I	
CO1	Define Pratyatma Lakshana with suitable examples	CK	MK	K	L&PPT	INT	F&S	I	
CO1	Differentiate between Vyadhi and Lakshana.	CC	MK	KH	L&GD	INT	F&S	I	

Topic 15 15. Vyadhinamakarana (Lecture :1 hours, Non lecture: 1 hours)									
CO1	Describe the basis of Vyadhi Namakarana with suitable examples	CK	MK	K	L	QZ	F&S	I	
CO6	Describe the importance of ICD, DSM and NAMASTE (National AYUSH Morbidity and Standardized Terminologies Electronic Portal) portal classification and terminology of diseases	CC	DK	KH	L&G D,D	INT	F&S	I	
CO6	Operate NAMASTE (National AYUSH Morbidity and Standardized Terminologies Electronic Portal) portal	PSY-GUD	DK	SH	D	P-PRF	F&S	I	
Topic 16 16. Vyadhi (Lecture :4 hours, Non lecture: 0 hours)									
CO1	Define & enlist synonyms of Vyadhi	CK	MK	K	L&PP T	INT	F&S	I	
CO1	Enlist types of Vyadhi	CK	MK	K	L&PP T	INT	F&S	I	
CO1,CO2	Explain Adibala/ Sahaja and Hereditary disorders, Janmabala/ Garbhaja and Congenital disorders, Dosha bala/ Jataja and Acquired disorders, Sanghatabala/ Peedaja and Traumatic disorders, Daivabala/ Prabhavaja and Iatrogenic disorders, Kalabala/ Kalaja and Environmental and Geriatric disorders, Swabhava bhava vyadhi with suitable examples	CC	MK	KH	L&PP T	CL-PR	F&S	I	
Topic 17 17. Ashtanindita (Endocrine disorders) (Lecture :1 hours, Non lecture: 0 hours)									
CO1	Enlist and explain the Ashtanindita	CC	DK	KH	L&PP T	INT	F&S	I	
CO1	Describe the importance of Ashtanindita	CC	DK	KH	L&G D	DEB	F&S	I	
CO1,CO2	Correlate and describe the features of Hormonal/ Endocrinal	CE	DK	KH	L&G	COM	F&S	I	V-BL

	diseases (Pituitary disorders, Parathyroid disorders, Adrenal disorders etc.) with Ashtanindita				D,TPW				
Topic 18 18. Janapadodhwamsa vikara (Pandemic disorders) (Lecture :1 hours, Non lecture: 0 hours)									
CO1	Describe sadharana and asadharana hetu for Janapadodhwamsa Vikara and correlate with contemporary etiologies	CC	DK	KH	L&GD	DEB	F&S	I	V-KC,H-SW
Topic 19 19. Nidanarthakara Vyadhi, Vyadhisankara (Lecture :1 hours, Non lecture: 0 hours)									
CO1	Define and enlist types of Nidanarthakara Vyadhi with examples along with its concept	CC	DK	KH	L&GD	INT	F&S	I	
CO1	Explain the concept of Vyadhi Sankara with specific Nidana and relevant examples	CC	DK	KH	L&PPT	INT	F&S	I	
Topic 20 20. Vyadhikshamatva (Lecture :2 hours, Non lecture: 0 hours)									
CO1	Define Vyadhikshamatva	CK	MK	K	L&PPT	INT	F&S	I	
CO1	Describe Trividha bala and relate to Balavruddhikara Bhava and Shareeravruddhikara Bhava	CC	MK	K	L&PPT	M-CHT	F&S	I	
CO1	Describe Vikara Vighata Bhava and Abhava along with its relation to Vyadhikshamatva	CC	MK	KH	DIS	INT	F&S	I	
CO1	Analyze Satmya in relation with health and disease	CAN	MK	KH	L&GD	INT	F&S	I	
CO1	Define and explain Dwividha and Chaturvidha Ojas	CK	MK	K	L&PPT	INT	F&S	I	
CO1	Describe Dosha Paka features with examples	CC	MK	KH	L&PPT	INT	F&S	I	

CO2	Describe pathophysiology of Healing with primary and secondary intention and Repair mechanism.	CC	MK	KH	L_VC	CL-PR	F&S	I	
CO1	Define Satmya and explain its types	CC	MK	KH	L&PPT	INT	F&S	I	
CO2	Define Immunity and describe classification of Immunity	CC	MK	KH	SDL	CL-PR	F&S	I	
CO2	Explain different mechanisms involved in Immunity	CC	MK	KH	SDL	CL-PR	F&S	I	
Topic 21 21. Rogi bala Pareeksha (Lecture :2 hours, Non lecture: 1 hours)									
CO1	Describe the importance of Rogi bala Pareeksha	CC	MK	KH	L&GD	DEB	F&S	I	
CO1,CO8	Describe the parameters of Rogi bala Pareeksha - Prakruti, Sara, Samhanana, Pramana, Satmya, Satwa, Aahara shakti, Vyayama shakti, Vaya and other factors such as Aushadha kshama dehatva, Yuvajatva, Pumjatvam, Vishayanasakta indriyajatva, Padasampad bhavatvam, and Anukoola grahatva, etc.	CC	MK	KH	L&PPT	INT	F&S	I	
Topic 22 22. Dhatu Paka (Lecture :12 hours, Non lecture: 1 hours)									
CO1	Describe Dhatupaka features with examples	CC	MK	KH	L&PPT	INT	F&S	I	
CO1	Describe different stages of Ojo dusti	CK	MK	K	L&PPT	INT	F&S	I	
CO2	Define Asatmya	CK	MK	K	L&PPT	O-QZ	F&S	I	
CO2	Define Hypersensitivity	CK	MK	K	L&PPT	QZ	F&S	I	
CO2	Describe four types of Hypersensitivity with suitable examples	CC	MK	KH	L_VC	CL-PR	F&S	I	

CO2	Define Autoimmunity	CK	MK	K	L&PPT	O-QZ	F&S	I	
CO2	Describe mechanism and classification of Autoimmunity with suitable examples	CC	MK	KH	L_VC	CL-PR	F&S	I	
CO2	Define Immunodeficiency.	CK	MK	K	L&PPT	CL-PR	F&S	I	
CO2	Describe classification of Immunodeficiency with suitable examples.	CC	MK	KH	L&PPT	M-CHT	F&S	I	
CO2	Define Cell Injury	CK	MK	K	L&PPT	QZ	F&S	I	
CO2	Describe causes and mechanism of Reversible and Irreversible Cell Injury with microscopic and macroscopic features.	CC	MK	KH	L_VC	CL-PR	F&S	I	
CO2	Define Cellular Adaptation	CK	MK	K	L&PPT	QZ	F&S	I	
CO2	Describe types and mechanisms of Cellular Adaptations with suitable examples.	CC	MK	KH	L_VC	CL-PR	F&S	I	
CO2	Describe and discuss types of Cell Death (including apoptosis) and the mechanism with suitable examples.	CC	MK	KH	L_VC	CL-PR	F&S	I	
CO2	Define, classify and describe mechanism of Inflammation, Septicaemia, Oedema, Shock, Haemorrhage, Thrombosis, Embolism, Ischemia and Infarction	CC	MK	KH	L_VC	CL-PR	F&S	I	
CO2	Define and describe Tumors	CC	MK	KH	L&PPT	CL-PR	F&S	I	
CO2	Describe nomenclature of Tumors	CC	MK	KH	L&PPT,SD	CL-PR	F&S	I	

					L				
CO2	Differentiate Benign and Malignant Tumours	CC	MK	KH	L&GD	M-CHT	F&S	I	
CO2	Describe mechanism of Metastasis	CC	MK	KH	L&PPT	CL-PR	F&S	I	
Topic 23 23. Infection and Nutritional disorders (Lecture :4 hours, Non lecture: 1 hours)									
CO2	Define and classify Viruses, Bacteria, and Fungi	CC	DK	KH	L&PPT,SDL	COM	F&S	I	
CO2	Describe components of Nutrition, and classify nutritional disorders	CC	DK	KH	PER	QZ	F&S	I	H-SW
CO2	Describe Macro nutritional disorders, Water soluble vitamins deficiency disorders and Fat soluble vitamins deficiency disorders	CC	DK	KH	PER	QZ	F&S	I	V-KC,H-SW
CO2	Describe Protein Energy Malnutrition in adults and differentiate Kwashiorkor and Marasmus	CC	DK	KH	PER	QZ	F&S	I	V-KC,V-BL
Topic 24 24. Upadrava (Lecture :1 hours, Non lecture: 0 hours)									
CO1	Define and explain the concept and importance of Upadrava	CC	MK	KH	L&GD	DEB	F&S	II	
Topic 25 25. Arishta (Lecture :1 hours, Non lecture: 0 hours)									
CO1	Define Arishta and Ristaabhasa	CK	NK	K	L&PPT	INT	F&S	II	
CO1	Enumerate and describe types of Arishta with its importance	CC	NK	KH	L&GD	DEB	F&S	II	

Topic 26 26. Vyadhi bala pareeksha (Lecture :1 hours, Non lecture: 0 hours)									
CO1	Describe Vikrititaha Pareeksha with its importance	CC	DK	KH	L&GD	DEB	F&S	II	
CO1	Describe the parameters to be assessed for Vyadhi bala - Exposure to Nidana, Samprapti, Poorvaroopa, Roopa, Upadrava, Tulya dosha - dushyatvam, Atulya ritu, Number of dosha involved, Number of Rogamarga involved, Kala, Desha, Prakruti, Involvement of Marma and other factors	CC	DK	KH	L&GD	DEB	F&S	II	
Topic 27 27. Sadhyasadhyatva – Prognosis (Lecture :1 hours, Non lecture: 0 hours)									
CO1	Enumerate and describe the features of sadhyasadhyatva	CC	MK	KH	L&PPT	INT	F&S	II	
CO1	Analyse the components of Vyadhi from Sadhyasadhyatva	CAN	MK	KH	L&GD	INT	F&S	II	
Topic 28 28. Digital health and Artificial intelligence in the context of Roganidana (Lecture :1 hours, Non lecture: 1 hours)									
CO6	Define and describe the scope of Digital health and Artificial intelligence in Ayurveda Diagnosis and Prognosis	CC	NK	KH	BL	COM	F&S	II	
CO6	Explain need of Instrumentation and Biosensors for diagnosis and prognosis in Ayurveda.	CC	NK	KH	BL	INT	F&S	II	
CO6	Justify scope of Diagnostic tool development in Ayurveda and their implementation.	CE	NK	KH	BL	INT	F&S	II	

Paper 2 Vyadhi Vigyan, contemporary understanding and updates									
A3 Course	**B3** Learning Objective (At the end of the session, the students	**C3** Doma	**D3** Must to know	**E3** Level	**F3** T-L	**G3** Assessment	**H3** Form	**I3** Term	**J3** Integr

outcome	should be able to)	in/sub	/ desirable to know / Nice to know	Does/ Shows how/ Knows how/ Know	method	(Refer abbreviations)	ative/ summative		ation
Topic 1 1. Agnimandya – Ajeerna, Anaha, Adhmana, Atopa (Lecture :1 hours, Non lecture: 0 hours)									
CO1	Define Anaha	CK	MK	K	L&PPT	QZ	F&S	II	
CO1	Enlist types of Anaha	CK	MK	K	L&PPT	QZ	F&S	II	
CO1,CO5	Describe Adhmana and Atopa	CC	MK	KH	L&PPT	INT	F&S	II	
Topic 2 2. Chhardi (Lecture :1 hours, Non lecture: 0 hours)									
CO1	Define Chhardi	CK	DK	K	L&PPT	QZ	F&S	II	
CO1	Describe hetu and samprapti of Chhardi.	CC	DK	KH	L&GD	INT	F&S	II	
CO1	Enlist bheda of Chhardi	CK	DK	K	L&PPT	QZ	F&S	II	
CO1	Describe purvaroopa, samanya lakshana, vishishta lakshana, upadrava and sadhya asadhyata of Chhardi	CC	DK	KH	L&PPT	INT	F&S	II	
Topic 3 3. Amlapitta (Lecture :2 hours, Non lecture: 0 hours)									

CO1	Define Amlapitta	CK	MK	K	L&PPT	QZ	F&S	II	
CO1	Describe hetu and samprapti of Amlapitta	CC	MK	KH	L&GD	M-CHT	F&S	II	
CO1	Enlist bheda of Amlapitta	CK	MK	K	L&PPT	QZ	F&S	II	
CO1	Describe purvaroopa, samanya lakshana, vishishta lakshana, and sadhya asadhyata of Amlapitta	CC	MK	KH	L&PPT	INT	F&S	II	
Topic 4 4. Shoola (Lecture :1 hours, Non lecture: 0 hours)									
CO1	Define Shoola	CK	MK	K	L&PPT	QZ	F&S	II	
CO1	Enlist Shoola bheda	CK	MK	K	L&PPT	QZ	F&S	II	
CO1,CO5	Describe and differentiate Parinama shoola and Annadrava shoola	CC	MK	KH	L&PPT	INT	F&S	II	
Topic 5 5. Atisara, and Pravahika (Lecture :3 hours, Non lecture: 1 hours)									
CO1	Describe pratyatma lakshana of Atisara	CC	MK	KH	L&PPT	QZ	F&S	II	
CO1	Describe hetu and samprapti of Atisara	CC	MK	KH	L&GD	INT	F&S	II	
CO1	Enlist bheda of Atisara	CK	MK	KH	L&PPT	QZ	F&S	II	
CO1	Describe purvaroopa of Atisara	CC	MK	KH	L&PPT,CB	INT	F&S	II	

					L				
CO1	Enlist and describe upadrava of Atisara	CK	MK	K	L&PPT	INT	F&S	II	
CO1	Describe sadhya asadhyata of Atisara	CC	MK	KH	L&PPT	T-CS,INT	F&S	II	
CO1	Describe nivrutta Atisara lakshana or vigata Atisara lakshana	CC	MK	KH	L&PPT	INT	F&S	II	
CO1	Describe samprapti of Pravahika	CC	MK	KH	L&GD	M-CHT	F&S	II	
CO1	Enlist bheda of Pravahika	CK	MK	KH	L&PPT	QZ	F&S	II	
CO1	Describe samanya and vishishta lakshana of Pravahika	CC	MK	KH	L&PPT,CBL	T-CS	F&S	II	
CO1	Differentiate between Atisara and Pravahika	CC	MK	KH	L&GD,PBL	CL-PR	F&S	II	
CO1	Differentiate Doshaja Atisara	CC	MK	KH	L&GD,PBL	CL-PR	F&S	II	
CO1	Explain Bhayaja atisara, Shokaja atisara and Raktaja atisara lakshana	CC	MK	KH	L&GD,PBL	CL-PR	F&S	II	
Topic 6 6. Grahani (Lecture :2 hours, Non lecture: 1 hours)									
CO1	Describe pratyatma lakshana of Grahani	CC	MK	KH	L&PP	PUZ	F&S	II	

					T				
CO1	Describe hetu and samprapti of Grahani	CC	MK	KH	L&GD	M-CHT	F&S	II	
CO1	Enlist bheda of Grahani	CK	MK	KH	L&PPT	QZ	F&S	II	
CO1	Describe purvaroopa, and samanya lakshana of Grahani	CC	MK	KH	L&PPT	T-CS,INT	F&S	II	
CO1	Explain Sangraha grahani and Ghati yantra grahani	CC	MK	KH	L&PPT,CBL	INT	F&S	II	
CO1	Explain sadhya asadhyata of Grahani	CC	MK	KH	L&PPT	T-CS,INT	F&S	II	
CO1	Differentiate Atisara and Grahani Roga	CC	MK	KH	L&GD,PBL	T-CS	F&S	II	
CO1	Differentiate Grahani dosha and Grahani roga	CC	MK	KH	L&GD,PBL	T-CS,CL-PR	F&S	II	
CO1	Differentiate Doshaja Grahani	CC	MK	KH	L&GD,PBL	CL-PR	F&S	II	
Topic 7 7. Visuchika, Alasaka, Vilambika (Lecture :1 hours, Non lecture: 0 hours)									
CO1	Define Visuchika	CK	MK	K	L&PPT	QZ	F&S	II	
CO1	Describe lakshana, upadrava, and sadhyasadhyata of Visuchika ,	CC	MK	KH	L&PP	INT	F&S	II	

	Alasaka and Vilambika				T				
Topic 8 8. Common GIT diseases (Lecture :1 hours, Non lecture: 4 hours)									
CO2	Describe the clinical features of Ulcerative dyspepsia and Non-ulcerative dyspepsia, Irritable Bowel Syndrome, and Inflammatory Bowel Diseases	CC	DK	KH	RP,TUT	INT	F&S	II	
CO3	Perform relevant clinical examination of Ulcerative dyspepsia and Non-ulcerative dyspepsia, Irritable Bowel Syndrome, and Inflammatory Bowel Diseases	PSY-GUD	DK	SH	L_VC	OSCE	F&S	II	
CO4	Order and interpret relevant investigations of Ulcerative dyspepsia and Non-ulcerative dyspepsia, Irritable Bowel Syndrome, and Inflammatory Bowel Diseases	CAP	DK	SH	L&GD,LRI,D_L	T-CS	F&S	II	
Topic 9 9. Mutrakrichhra (Lecture :2 hours, Non lecture: 1 hours)									
CO1	Explain pratyatma lakshana of Mutrakrichhra	CC	MK	KH	L&PPT	PUZ	F&S	II	
CO1	Describe hetu and samprapti of Mutrakrichhra	CC	MK	KH	L&GD	INT	F&S	II	
CO1	Enlist bheda of Mutrakrichhra	CK	MK	KH	L&PPT	QZ	F&S	II	
CO1,CO5	Describe vishishta lakshana of Mutrakrichhra	CC	MK	KH	L&PPT,CBL	INT	F&S	II	
Topic 10 10. Mutraghata (Lecture :3 hours, Non lecture: 1 hours)									
CO1	Define Mutraghata	CK	MK	K	L&PPT	QZ	F&S	II	

CO1	Enlist conditions of Mutra shoshana and Mutra pratihanyate among different types of Mutraghata	CK	MK	K	L&GD	INT	F&S	II	
CO1	Describe different types of Mutraghata	CC	MK	KH	L&PPT,PBL	INT	F&S	II	
CO1	Differentiate Mutrakrichra and Mutraghata	CC	MK	KH	L&GD,PBL	T-CS	F&S	II	
Topic 11 11. Common Urinary diseases (Lecture :1 hours, Non lecture: 6 hours)									
CO2	Describe the clinical features of Urinary Tract Infection, Prostatomegaly, Nephrotic syndrome, Nephritic syndrome, Acute Kidney Injury and Chronic Kidney Disease	CC	DK	KH	L&GD,RP	T-CS	F&S	II	
CO3	Perform relevant clinical examination of Urinary Tract Infection, Prostatomegaly, Nephrotic syndrome, Nephritic syndrome, Acute Kidney Injury and Chronic Kidney Disease	PSY-GUD	DK	SH	L_VC	T-CS	F&S	II	
CO4	Order and interpret relevant investigations of Urinary Tract Infection, Prostatomegaly, Nephrotic syndrome, Nephritic syndrome, Acute Kidney Injury and Chronic Kidney Disease	CAP	DK	SH	L&GD,LRI	T-CS	F&S	II	
Topic 12 12. Hikka (Lecture :1 hours, Non lecture: 0 hours)									
CO1	Describe pratyatma lakshana, hetu, and samprapti of Hikka	CC	NK	KH	L&PPT	PUZ	F&S	II	
CO1	Describe cardinal features of Pancha Hikka	CC	NK	KH	L&PPT	INT	F&S	II	
Topic 13 13. Shwasa (Lecture :2 hours, Non lecture: 1 hours)									

CO1	Define Shwasa	CK	MK	K	L&PPT	QZ	F&S	II	
CO1	Describe hetu and samanya samprapti of Shwasa	CC	MK	KH	L&GD	T-CS	F&S	II	
CO1	Enlist bheda of Shwasa	CK	MK	K	L&PPT	P-VIVA,QZ	F&S	II	
CO1	Describe purvaroopa, and sadhya asadhyata of Shwasa	CC	MK	KH	L&PPT	T-CS	F&S	II	
CO1	Describe vishishta lakshana of Tamaka shwasa with its avastha bheda	CC	MK	KH	L&PPT	T-CS	F&S	II	
CO1	Describe dosha predominance in Shwasa	CC	MK	KH	DIS	INT	F&S	II	
CO1	Identify cardinal features of Pancha shwasa and correlate with the current science	CAN	MK	KH	L&PPT	INT	F&S	II	
CO1	Differentiate Pancha shwasa	CC	MK	KH	PBL	CL-PR	F&S	II	
Topic 14 14. Kasa (Lecture :2 hours, Non lecture: 0 hours)									
CO1	Define Kasa	CK	MK	K	L&PPT	QZ	F&S	II	
CO1	Describe hetu and samprapti of Kasa	CC	MK	KH	L&GD	INT	F&S	II	
CO1	Enlist bheda of Kasa	CK	MK	K	L&PPT	QZ	F&S	II	
CO1	Describe purvaroopa and sadhya asadhyata of Kasa	CC	MK	KH	L&PPT	T-CS	F&S	II	
CO1	Describe the differential diagnosis of Kasa based on kapha	CC	MK	KH	L&PP	T-CS	F&S	II	

	lakshana				T				
CO1	Describe the differential diagnosis of Kshayaja kasa and Rajayakshma	CC	MK	KH	L&G D	T-CS	F&S	II	
CO1	Describe the differential diagnosis of Kshataja kasa and kshata ksheena	CC	MK	KH	L&G D	T-CS	F&S	II	
CO1	Differentiate Doshaja kasa	CC	MK	KH	DIS	INT	F&S	II	
Topic 15 15. Rajayakshma & Shosha (Lecture :3 hours, Non lecture: 0 hours)									
CO1	Describe Rajayakshma vyadhi swabhava	CC	DK	KH	L&PP T	INT	F&S	II	
CO1	Describe hetu and samprapti of Rajayakshma	CC	DK	KH	L&G D	M-CHT	F&S	II	
CO1	Enlist bheda of Rajayakshma	CK	DK	K	L&PP T	QZ	F&S	II	
CO1	Explain tri roopa, shad roopa, ekadasha roopa, and sadhyasadhyata of Rajayakshma	CC	DK	KH	L&PP T	INT	F&S	II	
CO1	Classify and describe Ashta shosha	CC	DK	KH	L&PP T	INT	F&S	II	
Topic 16 16. Common lung disorders (Lecture :1 hours, Non lecture: 4 hours)									
CO2	Describe the clinical features of Pneumonia, Chronic Obstructive Pulmonary Disease, Pleural effusion, and Bronchiectasis	CC	DK	KH	L_VC ,RP,D _BED	INT	F&S	II	
CO3	Perform relevant clinical examination of Pneumonia, Chronic Obstructive Pulmonary Disease, Pleural effusion, and Bronchiectasis	PSY-GUD	DK	SH	L_VC	OSCE	F&S	II	

CO4	Order and interpret relevant investigations of Pneumonia, Chronic Obstructive Pulmonary Disease, Pleural effusion, and Bronchiectasis	CAP	DK	KH	XRay, LRI	T-CS	F&S	II	
Topic 17 17. Jwara (Lecture :4 hours, Non lecture: 1 hours)									
CO1	Define and enlist types of Jwara based on vidhi samprapti	CK	MK	K	L&PPT	QZ	F&S	II	
CO1	Describe nidana, samprapti, samanya poorvaroopa, vishishta poorvaroopa, pratyatma lakshana and samprapti of Doshaja jwara	CC	MK	KH	L&GD	PUZ,INT	F&S	II	
CO1	Describe Doshaja jwara along with sannipataja jwara according to Charaka	CC	MK	KH	L&GD	PUZ,INT	F&S	II	
CO1	Describe Abhishanga jwara, Vishama jwara, and Punaravartaka jwara	CC	MK	KH	L&PPT	T-CS	F&S	II	
CO1	Explain Antarvega, Bhahirvega jwara, Vata balasaka and Pralepaka jwara	CC	MK	KH	L&PPT	INT	F&S	II	
CO1	Differentiate Ama, Pachyamana and Nirama jwara lakshana	CC	MK	KH	L&GD	CL-PR	F&S	II	
CO1	Analyze Agantu and Doshaja jawara with reference to Jwara samprapti	CAN	MK	KH	DIS	INT	F&S	II	
CO1	Describe sadhyasadhyata of Jwara	CC	MK	KH	L&PPT	INT	F&S	II	
CO1	Enlist Jwara mukta lakshana	CK	MK	K	L&PPT	QZ	F&S	II	
Topic 18 18. Masurika – Romantika (Lecture :1 hours, Non lecture: 0 hours)									
CO1	Enlist nidana of Masurika	CK	NK	K	L&PP	QZ	F&S	II	

					T				
CO1	Describe samprapti of Masurika	CC	NK	KH	L&GD	INT	F&S	II	
CO1	Enlist bheda of Masurika	CC	NK	KH	L&PPT	QZ	F&S	II	
CO1	Explain the avasthika lakshana of Masurika	CC	NK	KH	L&PPT	INT	F&S	II	
CO1	Enlist features of Romantika	CK	NK	K	L&PPT	QZ	F&S	II	
Topic 19 19. Fever (Lecture :1 hours, Non lecture: 6 hours)									
CO2	Describe the organism, incubation period, and mode of transmission of Measles virus, Varicella-zoster virus and Herpes zoster, Coxsackie virus, Rubella virus, various Malaria parasites, Influenza virus, Dengue virus, Leptospira, Chikungunya virus, Salmonella and causative agents of other common regional disorders presenting with fever	CC	DK	KH	L_VC,FC	WP,INT	F&S	II	
CO2	Describe the clinical features of Measles, Chicken pox and Herpes zoster, Hand foot mouth disease, Rubella, Malaria, Filariasis, Influenza, Dengue, Leptospirosis, Chikungunya, and Typhoid	CC	DK	KH	L_VC,RP	T-CS	F&S	II	
CO2	Describe the common regional disorders presenting with fever	CC	DK	KH	L&GD	T-CS	F&S	II	
CO2	Describe the complications of Measles, Chicken pox and Herpes zoster, Hand foot mouth disease, Rubella, Malaria, Filariasis, Influenza, Dengue, Leptospirosis, Chikungunya, Typhoid, and other common regional disorders presenting with fever	CC	DK	KH	TUT	INT	F&S	II	

CO3	Perform relevant clinical examination related to Measles, Chicken pox and Herpes zoster, Hand foot mouth disease, Rubella, Malaria, Filariasis, Influenza, Dengue, Leptospirosis, Chikungunya, Typhoid, and other common regional disorders presenting with fever	PSY-GUD	DK	SH	L_VC	OSCE	F&S	II	
CO4	Order and interpret relevant investigations related to Measles, Chicken pox and Herpes zoster, Hand foot mouth disease, Rubella, Malaria, Filariasis, Influenza, Dengue, Leptospirosis, Chikungunya, Typhoid, and other common regional disorders presenting with fever	CAP	DK	SH	LRI	T-CS	F&S	II	
Topic 20 20. Pandu (Lecture :2 hours, Non lecture: 0 hours)									
CO1	Describe pratyatma lakshana of Pandu	CC	MK	KH	L&PPT	PUZ	F&S	II	
CO1	Describe hetu and samprapti of Pandu	CC	MK	KH	L&PPT	INT	F&S	II	
CO1	Enlist bheda of Pandu	CC	MK	KH	L&PPT	QZ	F&S	II	
CO1	Describe purvaroopa of Pandu	CC	MK	KH	L&PPT	INT	F&S	II	
CO1	Enlist upadrava of Pandu	CK	MK	K	L&PPT	QZ	F&S	II	
CO1	Describe sadhya asadhyata of Pandu	CC	MK	KH	L&PPT	INT	F&S	II	
CO1	Explain Pancha pandu	CC	MK	KH	L&PPT	T-CS	F&S	II	

CO1	Differentiate Doshaja pandu	CC	MK	KH	L&GD	CL-PR	F&S	II	
Topic 21 21. Raktapitta (Lecture :1 hours, Non lecture: 1 hours)									
CO1	Define Raktapitta and mention the rakta pravrutti marga	CK	MK	K	L&PPT	QZ	F&S	II	
CO1	Explain the swabhava of Raktapitta	CC	MK	KH	DIS	INT	F&S	II	
CO1	Enlist bheda of Raktapitta	CK	MK	KH	L&PPT	QZ	F&S	II	
CO1	Describe nidana, samprapti, purvaroopa, vishishta lakshana of Raktapitta	CC	MK	KH	L&GD	T-CS	F&S	II	
CO1	Enlist upadrava of Raktapitta	CK	MK	KH	L&PPT	PUZ	F&S	II	
CO1	Describe sadhya asadhyata of Raktapitta	CC	MK	KH	DIS	INT	F&S	II	
Topic 22 22. Hematopoietic diseases (Lecture :1 hours, Non lecture: 6 hours)									
CO2	Describe the clinical features of anaemia, nutritional anaemia, thalassemia, sickle cell anaemia, leukaemia, and thrombocytopenia	CC	DK	KH	L_VC,RP	WP	F&S	II	
CO4	Order and interpret relevant investigations of anaemia, nutritional anaemia, thalassemia, sickle cell anaemia, leukaemia, and thrombocytopenia	CAP	DK	KH	L&GD,LRI	T-CS	F&S	II	
CO2	Describe the differential diagnosis of anaemia, nutritional anaemia, thalassemia, sickle cell anaemia, leukaemia, and thrombocytopenia	CC	DK	KH	L&GD,PBL	PRN	F&S	II	
Topic 23 23. Hridroga (Lecture :1 hours, Non lecture: 1 hours)									

CO1	Describe hetu and samprapti of Hridroga	CC	DK	KH	L&GD	QZ	F&S	II	
CO1	Enlist bheda of Hridroga	CK	DK	KH	L&PPT	PUZ	F&S	II	
CO1	Analyze samanya lakshana of Hridroga	CAN	DK	KH	DIS	T-CS	F&S	II	
CO1	Describe vishishta lakshana of Hridroga	CC	DK	KH	L&PPT	INT	F&S	II	
CO1	Enlist upadrava of Hridroga	CK	DK	KH	L&PPT	WP	F&S	II	
Topic 24 24. Shotha (Lecture :2 hours, Non lecture: 0 hours)									
CO1	Describe hetu of Shotha	CC	MK	KH	L&GD	O-QZ	F&S	II	
CO1	Enlist bheda of Shotha	CK	MK	KH	L&PPT	O-QZ	F&S	II	
CO1	Describe vidhi samprapti of shotha	CC	MK	KH	DIS	O-GAME	F&S	II	
CO1	Describe purvaroopa, vishishta lakshana, samprapti and sadhya asadhyata of Nija shotha	CC	MK	KH	L&GD	INT	F&S	II	
CO1	Differentiate Doshaja shotha	CC	MK	KH	L&GD	INT	F&S	II	
Topic 25 25. Cardiovascular disorders (Lecture :1 hours, Non lecture: 5 hours)									
CO2	Describe the clinical features of Coronary Artery Disease (Ischemic Heart Disease, and Myocardial Infarction) and Congestive cardiac failure	CC	DK	KH	L_VC,RP	C-VC	F&S	II	V-KC

CO3	Perform relevant clinical examination of Coronary Artery Disease (Ischemic Heart Disease, and Myocardial Infarction) and Congestive cardiac failure	PSY-GUD	DK	SH	L_VC ,SIM	OSCE	F&S	I	
CO4	Order and interpret relevant investigations of Coronary Artery Disease (Ischemic Heart Disease, and Myocardial Infarction) and Congestive cardiac failure	CAP	DK	KH	L&G D,LRI	O-QZ	F&S	II	
Topic 26 26. Kamala (Lecture :2 hours, Non lecture: 0 hours)									
CO1	Define Kamala	CK	MK	K	L&PP T	QZ	F&S	II	
CO1	Describe hetu and samprapti of Kamala	CC	MK	KH	L&G D	INT	F&S	II	
CO1	Classify Kamala on the basis of vidhi samprapti of Kamala	CC	MK	KH	L&PP T	INT	F&S	II	
CO1	Differentiate Koshta shakhashrita and Shakhashrita Kamala	CC	MK	KH	DIS	PRN	F&S	II	
CO1	Enlist upadrava of Kamala	CK	MK	KH	L&PP T	QZ	F&S	II	
CO1	Describe sadhya asadhyata of Kamala	CC	MK	KH	TUT	M-CHT	F&S	II	
CO1,CO5	Describe Swatantra-Paratantra Kamala, Alpapitta-Bahupitta Kamala	CC	MK	KH	L&PP T	INT	F&S	II	
Topic 27 27. Udara Roga (Lecture :2 hours, Non lecture: 1 hours)									
CO1	Explain pratyatma lakshana of Udara	CC	MK	KH	L&PP T	PUZ	F&S	II	
CO1	Describe hetu and samprapti of Udara	CC	MK	KH	L&G D	WP	F&S	II	

CO1	Enlist bheda of Udara	CK	MK	K	L&PPT	QZ	F&S	II	
CO1,CO5	Describe purvaroopa, samanya lakshana and sadhya asadhyata of Udara	CC	MK	KH	L&PPT	T-CS	F&S	II	
CO1	Explain avastha bheda of Udara	CC	MK	KH	DIS	PRN	F&S	II	
CO1,CO5	Differentiate Doshaja udara	CC	MK	KH	L&GD	M-CHT	F&S	II	
CO1,CO5	Explain Vishishta lakshana of Baddha gudodara, Pleehodara, Jalodara and Chidrodara	CC	MK	KH	L&PPT	M-CHT	F&S	II	
Topic 28 28. Hepatobiliary diseases (Lecture :1 hours, Non lecture: 2 hours)									
CO2,CO5	Describe the clinical features of Liver cirrhosis, Alcoholic and Non - Alcoholic Liver Disease, Hepatitis, Jaundice and Ascites	CC	DK	KH	L_VC,RP	C-VC	F&S	II	
CO3	Perform relevant clinical examination of Liver cirrhosis, Alcoholic and Non - Alcoholic Liver Disease, Hepatitis, Jaundice and Ascites	PSY-GUD	DK	SH	L_VC,D_BED	OSCE	F&S	II	
CO4	Order and interpret relevant investigations of Liver cirrhosis, Alcoholic and Non - Alcoholic Liver Disease, Hepatitis, Jaundice and Ascites	CAP	DK	SH	L&GD,LRI	PRN	F&S	II	
CO2,CO5	Describe the differential diagnosis of Liver cirrhosis, Alcoholic and Non - Alcoholic Liver Disease, Hepatitis, Jaundice and Ascites	CC	DK	KH	L&GD,PBL	M-CHT	F&S	II	
Topic 29 29. Kushtha - Maha Kushtha & Kshudra Kushtha (According to Charaka) (Lecture :3 hours, Non lecture: 1 hours)									
CO1	Define Kushtha	CK	MK	K	L&PPT	O-QZ	F&S	III	

CO1	Describe hetu and samprapti of Kushtha	CC	MK	KH	L&GD	COM	F&S	III	
CO1	Enlist bheda of Maha Kushtha & Kshudra Kushtha	CK	MK	K	L&PPT	O-QZ	F&S	III	
CO1	Describe purvaroopa of Kushtha	CC	MK	KH	L&GD	INT	F&S	III	
CO1,CO5	Describe vishishta lakshana of Maha Kushtha & Kshudra Kushtha	CC	MK	KH	L&PPT,CD	O-GAME	F&S	III	
CO1,CO5	Describe dosha anusara Kushtha lakshana	CC	MK	KH	L&GD	M-POS	F&S	III	
CO1	Describe sadhya asadhyata of Maha Kushtha & Kshudra Kushtha	CC	MK	KH	L&PPT	O-QZ	F&S	III	
CO1,CO5	Differentiate Maha kushtha & Kshudra kushtha	CC	MK	KH	DIS	CL-PR	F&S	III	
Topic 30 30. Sheetapitta (Lecture :1 hours, Non lecture: 0 hours)									
CO1	Describe Sheetapitta samprapti	CC	MK	KH	L&PPT	M-CHT	F&S	III	
CO1,CO5	Describe Sheetapitta and Udarda lakshana	CC	MK	KH	L&PPT	QZ	F&S	III	
CO1	Describe Kotha lakshana	CC	MK	KH	L&PPT	QZ	F&S	III	
CO1,CO5	Differentiate Sheetapitta and Udarda	CC	MK	KH	DIS	QZ	F&S	III	
Topic 31 31. Shwitra (Lecture :1 hours, Non lecture: 0 hours)									
CO1	Enlist types of Shwitra	CK	MK	K	L&PP	O-QZ	F&S	III	

					T				
CO1,CO5	Describe lakshana and sadhya asadhyata of Shwitra	CC	MK	KH	L&PPT	INT	F&S	III	
Topic 32 32. Visarpa (Lecture :2 hours, Non lecture: 0 hours)									
CO1	Define Visarpa	CK	MK	K	L&PPT	O-QZ	F&S	III	
CO1	Describe hetu and samprapti of Visarpa	CC	MK	KH	L&GD	M-CHT	F&S	III	
CO1	Enlist bheda of Visarpa	CK	MK	K	L&PPT	QZ	F&S	III	
CO1,CO5	Describe purvaroopa of visarpa, features of Bahya and Abhyantara visarpa and sadhya asadhyata of Visarpa	CC	MK	KH	L&PPT	PRN	F&S	III	
CO1,CO5	Differentiate Doshaja Visarpa	CC	MK	KH	DIS	INT	F&S	III	
CO1,CO5	Explain Agni, Kardama and Granthi visarpa	CC	MK	KH	L&PPT	T-CS	F&S	III	
Topic 33 33. Skin diseases (Lecture :1 hours, Non lecture: 6 hours)									
CO2,CO5	Describe the clinical features of Allergic disorders - Eczema, Urticaria; Squamous lesions - Psoriasis, Lichen planus; Bullous lesion – Pemphigus and Pemphigoid; Mycotic skin diseases; Leprosy; Vitiligo; Cellulitis	CC	DK	KH	L_VC	C-VC	F&S	III	
CO3	Perform relevant clinical examination of Allergic disorders - Eczema, Urticaria; Squamous lesions - Psoriasis, Lichen planus; Bullous lesion – Pemphigus and Pemphigoid; Mycotic skin diseases; Leprosy; Vitiligo; Cellulitis	PSY-GUD	DK	SH	L_VC,D_BED	OSCE	F&S	III	

CO4	Order and interpret relevant investigations of Allergic disorders - Eczema, Urticaria; Squamous lesions - Psoriasis, Lichen planus; Bullous lesion – Pemphigus and Pemphigoid; Mycotic skin diseases; Leprosy; Vitiligo; Cellulitis	CAP	DK	SH	L&GD,LRI	INT	F&S	III	
Topic 34 34. Galaganda (Lecture :1 hours, Non lecture: 0 hours)									
CO1	Describe pratyatma lakshana and samprapti of Galaganda	CC	NK	KH	L&PPT	PUZ	F&S	III	
Topic 35 35. Thyroid disorders (Lecture :1 hours, Non lecture: 1 hours)									
CO2,CO5	Describe the clinical features of Hypothyroidism and hyperthyroidism	CC	DK	KH	L_VC,RP	M-POS	F&S	III	
CO3	Perform relevant clinical examination of Hypothyroidism and hyperthyroidism	PSY-GUD	DK	SH	L_VC,D_BED	OSCE	F&S	III	
CO4	Order and interpret relevant investigations of Hypothyroidism and hyperthyroidism	CAP	DK	SH	L&GD,LRI	SP	F&S	III	
Topic 36 36. Sthoulya – Karshya (Lecture :1 hours, Non lecture: 0 hours)									
CO1	Describe nidana of Sthoulya and Karshya	CC	MK	KH	L&PPT	T-OBT	F&S	III	
CO1	Describe samprapti of Sthoulya	CC	MK	KH	L&GD	M-CHT	F&S	III	
CO1,CO5	Describe samanya and vishista lakshana of Sthoulya	CC	MK	KH	L&PPT	QZ	F&S	III	
CO1,CO5	Describe samanya lakshana of Karshya	CC	MK	KH	L&PPT	O-QZ	F&S	III	

CO1	Describe upadrava of Sthoulya	CC	MK	KH	L&PPT	O-QZ	F&S	III	
CO1,CO5	Differential diagnosis of Karshya	CC	MK	KH	DIS	CL-PR	F&S	III	
Topic 37 37. Obesity (Lecture :1 hours, Non lecture: 1 hours)									
CO2,CO5	Describe the clinical features of Obesity	CC	DK	KH	FC	WP	F&S	III	H-SW
CO3	Perform relevant clinical examination of Obesity	PSY-GUD	DK	SH	L_VC,D_BED	OSCE	F&S	III	
CO4	Order and interpret relevant investigations of Obesity	CAP	DK	SH	PBL, LRI	INT	F&S	III	
CO2,CO5	Describe the differential diagnosis of Obesity	CC	DK	KH	L&GD,PBL	INT	F&S	III	
Topic 38 38. Prameha (Lecture :2 hours, Non lecture: 1 hours)									
CO1	Describe pratyatma lakshana of Prameha	CC	MK	KH	L&PPT	PUZ	F&S	III	
CO1	Describe hetu and samprapti of Prameha	CC	MK	KH	L&GD	M-CHT	F&S	III	
CO1	Enlist bheda of Prameha	CK	MK	K	L&PPT	QZ	F&S	III	
CO1,CO5	Describe purvaroopa, vishishta lakshana, upadrava and sadhya asadhyata of Prameha	CC	MK	KH	L&PPT	PRN	F&S	III	
Topic 39 39. Diabetes Mellitus and Pancreatitis (Lecture :1 hours, Non lecture: 1 hours)									

CO2,CO5	Describe the clinical features of Diabetes Mellitus and Pancreatitis	CC	DK	KH	L&GD,CBL	INT	F&S	III	
CO2	Describe the complications of Diabetes Mellitus and Pancreatitis	CC	DK	KH	L_VC	T-CS	F&S	III	
CO3	Perform relevant clinical examination of Diabetes Mellitus and Pancreatitis	PSY-GUD	DK	SH	L_VC,D_BED	OSCE	F&S	III	
CO4	Order and interpret relevant investigations of Diabetes Mellitus and Pancreatitis	CAP	DK	SH	L&GD,LRI	SP	F&S	III	
CO2,CO5	Describe Pancreatitis induced Diabetes mellitus (Fibrocalculous pancreatic Diabetes)	CC	DK	KH	L&GD	INT	F&S	III	
Topic 40 40. Vatavyadhi (Lecture :1 hours, Non lecture: 0 hours)									
CO1,CO5	Describe nidana, samanya purvaroopa, and samanya lakshana of Vatavyadhi	CC	MK	KH	L&PPT	QZ	F&S	III	
Topic 41 41. Snayugata vata (Lecture :4 hours, Non lecture: 2 hours)									
CO1	Define Akshepaka	CK	MK	K	L&PPT	QZ	F&S	III	
CO1	Enlist Snayugata vata	CK	MK	K	L&PPT	QZ	F&S	III	
CO1,CO5	Describe Akshepaka	CC	MK	KH	L_VC	C-VC	F&S	III	
CO1	Enlist Akshepaka bheda	CK	MK	K	L&PPT	QZ	F&S	III	
CO1	Explain Akshepaka Samprapti	CC	MK	KH	L&GD	M-CHT	F&S	III	

CO1,CO5	Describe Apatanaka	CC	MK	KH	L&PPT	INT	F&S	III	
CO1	Enlist Apatanaka bheda	CK	MK	K	L&PPT	QZ	F&S	III	
CO1,CO5	Describe Dandapatanaka, Antarayama and Bahirayama	CC	MK	KH	L&PPT,CBL	C-VC	F&S	III	
CO1	Define Ardita	CK	MK	K	L&PPT	O-QZ	F&S	III	
CO1,CO5	Describe Ardita, samprapti of Ardita and lakshana of Ardita	CC	MK	KH	L_VC	INT, C-VC	F&S	III	
CO1	Compare Ardita according to Charaka and Sushruta	CC	MK	KH	DIS	C-VC	F&S	III	
CO1	Enlist Sadyasadyata of Ardita	CK	MK	K	L&PPT	INT	F&S	III	
CO1	Define Pakshaghata	CK	MK	K	L&PPT	QZ	F&S	III	
CO1,CO5	Describe Pakshaghata samprapti, and Pakshaghata lakshana	CC	MK	KH	L&GD,CD	C-VC	F&S	III	
CO1,CO5	Describe Kampavata	CC	MK	KH	L_VC	C-VC	F&S	III	
CO1,CO5	Describe Gridhrasi and Vishwachi with its lakshana	CC	MK	KH	CBL	T-CS	F&S	III	
CO1,CO5	Describe differential diagnosis of Gridhrasi and Viswachi	CC	MK	KH	L&GD	INT	F&S	III	
CO1,CO5	Describe Pangutwa	CC	MK	KH	L_VC	C-VC	F&S	III	
CO1,CO5	Differentiate Khanja with Gridhrasi	CC	MK	KH	L&G	C-VC	F&S	III	

					D				
Topic 42 42. Common neurologic and spine disorders (Lecture :2 hours, Non lecture: 4 hours)									
CO2,CO5	Describe the clinical features of Common neurologic diseases: Parkinson's disease, Stroke, Bell's Palsy, Motor Neuron Disease, Transverse myelitis, Epilepsy (Organic) and Common Spine disorders: Lumbago- Sciatica syndrome, Brachial neuralgia, Cervical and Lumber Spondylosis	CC	DK	KH	L_VC ,RP	C-VC	F&S	III	
CO3	Perform relevant clinical examination of Common neurologic diseases: Parkinson's disease, Stroke, Bell's Palsy, Motor Neuron Disease, Transverse myelitis, Epilepsy (Organic) and Common Spine disorders: Lumbago- Sciatica syndrome, Brachial neuralgia, Cervical and Lumber Spondylosis	PSY-GUD	DK	SH	L_VC ,D_B ED	OSCE	F&S	III	
CO4	Order and interpret relevant investigations of Common neurologic diseases: Parkinson's disease, Stroke, Bell's Palsy, Motor Neuron Disease, Transverse myelitis, Epilepsy (Organic) and Common Spine disorders: Lumbago- Sciatica syndrome, Brachial neuralgia, Cervical and Lumber Spondylosis	CAP	DK	SH	L&G D,LRI	INT	F&S	III	
Topic 43 43. Sandhigatavata and Asthi majja gata vata (Lecture :1 hours, Non lecture: 0 hours)									
CO1,CO5	Describe Sandhigatavata	CC	MK	KH	L_VC	C-VC	F&S	III	
CO1,CO5	Describe Katigraha and Manyastambha	CC	MK	KH	L&PP T	INT	F&S	III	
CO1,CO5	Explain Vatakantaka	CC	MK	KH	L&PP T	T-CS	F&S	III	
CO1,CO5	Describe Avabahuka and Amsashosha	CC	MK	KH	L&PP T	INT	F&S	III	

CO1,CO5	Describe the differential diagnosis of Avabahuka with Vishwachi	CC	MK	KH	L&GD	QZ	F&S	III	
CO1,CO5	Describe Asthi-majjagata vata	CC	MK	KH	L&PPT	INT	F&S	III	
Topic 44 44. Diseases of bone, joints, and muscles (Lecture :1 hours, Non lecture: 2 hours)									
CO2,CO5	Describe the clinical features of Diseases of bone and Joints - Osteoarthritis, Osteoporosis, Frozen Shoulder, Calcaneal spur/ Plantar fasciitis, Tennis elbow, Carpel tunnel syndrome; Muscular diseases - Muscular Dystrophy	CC	DK	KH	L_VC	C-VC	F&S	III	
CO3	Perform relevant clinical examination of Diseases of bone and Joints - Osteoarthritis, Osteoporosis. Frozen Shoulder, Calcaneal spur/ Plantar fasciitis, Tennis elbow, Carpel tunnel syndrome; Muscular diseases - Muscular Dystrophy	PSY-GUD	DK	SH	L_VC,D_BED	OSCE	F&S	III	
CO4	Order and interpret relevant investigations of Diseases of bone and Joints - Osteoarthritis, Osteoporosis. Frozen Shoulder, Calcaneal spur/ Plantar fasciitis, Tennis elbow, Carpel tunnel syndrome; Muscular diseases - Muscular Dystrophy	CAP	DK	SH	L&GD,XRay,LRI	INT	F&S	III	
Topic 45 45. Amavata (Lecture :2 hours, Non lecture: 0 hours)									
CO1	Describe hetu and samprapti of Amavata	CC	MK	KH	L&PPT	M-CHT	F&S	III	
CO1	Enlist bheda of Amavata	CK	MK	K	L&PPT	QZ	F&S	III	
CO1,CO5	Describe samanya lakshana, vishishta lakshana, upadrava and sadhya asadhyata of Amavata	CC	MK	KH	L_VC	C-VC	F&S	III	
Topic 46 46. Vatarakta (Lecture :2 hours, Non lecture: 1 hours)									

CO1	Define Vatarakta with its synonyms	CK	MK	K	L&PPT	O-QZ	F&S	III	
CO1	Describe hetu and samprapti of Vatarakta	CC	MK	KH	L&GD	M-CHT	F&S	III	
CO1	Explain Samprapti of Avasthika Vatarakta	CC	MK	KH	L&GD	INT	F&S	III	
CO1,CO5	Enlist and explain vidhi samprapti of Vatarakta	CC	MK	KH	L&GD	INT	F&S	III	
CO1,CO5	Enlist and explain bheda of doshaja Vatarakta	CC	MK	KH	L&GD	T-CS	F&S	III	
CO1,CO5	Describe purvaroopa, upadrava, and sadhya asadhyata of Vatarakta	CC	MK	KH	L&PPT	INT	F&S	III	
CO1,CO5	Describe the differential diagnosis of Sandhigata vata, Amavata and Vata rakta	CC	MK	KH	L&GD	T-CS,INT	F&S	III	
Topic 47 47. Immunological & Metabolic disorders (Lecture :1 hours, Non lecture: 2 hours)									
CO2,CO5	Describe the clinical features of Rheumatic fever, Rheumatoid arthritis, SLE, Ankylosing spondylitis, Gout	CC	DK	KH	L_VC,RP	C-VC	F&S	III	
CO3	Perform relevant clinical examination of Rheumatic fever, Rheumatoid arthritis, SLE, Ankylosing spondylitis, Gout	PSY-GUD	DK	SH	L_VC,D_BED	OSCE	F&S	III	
CO4	Order and interpret relevant investigations of Rheumatic fever, Rheumatoid arthritis, SLE, Ankylosing spondylitis, Gout	CAP	DK	SH	L&GD,LRI	T-CS	F&S	III	
CO2,CO5	Describe the differential diagnosis of Arthritis	CC	DK	KH	L&GD,PBL	T-CS	F&S	III	

Topic 48 48. Klaibya & Vandhyatva (Lecture :1 hours, Non lecture: 0 hours)									
CO1	Describe Klaibya and vandhyatva	CC	NK	KH	L&PPT	QZ	F&S	III	
CO1	Enlist types of Klaibya and Vandhyatva	CK	NK	K	L&PPT	QZ	F&S	III	
Topic 49 49. Sexual dysfunction and Infertility (Lecture :1 hours, Non lecture: 1 hours)									
CO2	Order and interpret relevant investigations of Sexual dysfunction and Infertility	CAP	NK	SH	L&GD,LRI	T-CS	F&S	III	
CO2	Describe differential diagnosis of Sexual dysfunction and Infertility	CC	NK	KH	L&GD	INT	F&S	III	V-SP
Topic 50 50. Unmada & Apasmara (Lecture :3 hours, Non lecture: 0 hours)									
CO1	Explain nirukti of Unmada and Apasmara	CC	NK	KH	L&PPT	O-QZ	F&S	III	
CO1	Explain pratyatmalakshana of Unmada and Apasmara	CC	NK	KH	L&PPT	PUZ	F&S	III	
CO1	Describe hetu and samprapti of Unmada and Apasmara	CC	NK	KH	L&GD	M-CHT	F&S	III	
CO1	Enlist bheda of Unmada and Apasmara	CK	NK	K	L&PPT	QZ	F&S	III	
CO1	Describe samanya lakshana of Unmada and Apasmara	CC	NK	KH	L&GD,L_VC	QZ , C-VC	F&S	III	
Topic 51 51. Vishada (Lecture :1 hours, Non lecture: 0 hours)									

CO1	Define Vishada	CK	NK	K	L&PPT	QZ	F&S	III	
Topic 52 52. Murchha, and Sanyasa (Lecture :1 hours, Non lecture: 0 hours)									
CO1	Describe the Utpadaka hetu of Murchha, and Sanyasa	CC	NK	KH	L&PPT	INT	F&S	III	
CO1	Describe samprapti of Murchha, and Sanyasa	CC	NK	KH	L&GD	M-CHT	F&S	III	
Topic 53 53. Common Psychiatric diseases (Lecture :1 hours, Non lecture: 0 hours)									
CO2,CO5	Describe clinical manifestation of Depression, Anxiety neurosis and Epilepsy (Non-organic)	CC	NK	KH	L&PPT	QZ	F&S	III	
CO2,CO5	Differentiate Depression, Anxiety neurosis, and Epilepsy (Non-organic)	CC	NK	KH	L&GD	CL-PR	F&S	III	
CO3	Perform mental status examination for Depression, Anxiety neurosis, and Epilepsy (Non-organic)	PSY-GUD	NK	SH	L_VC,D_BED	INT	F&S	III	
Topic 54 54. Phiranga and Upadamsha (Lecture :1 hours, Non lecture: 0 hours)									
CO1	Describe nidana of Phiranga and Upadamsha	CC	NK	KH	L&PPT	QZ	F&S	III	
CO1	Explain the Upadamsha samprapti	CC	NK	KH	L&PPT	M-CHT	F&S	III	
CO1	Enlist the types of Phiranga	CK	NK	K	L&PPT	QZ	F&S	III	
Topic 55 55. Syphilis & Gonorrhoea (Lecture :1 hours, Non lecture: 1 hours)									

CO2	Describe causative factors, and clinical features of Syphilis and Gonorrhoea	CC	NK	KH	L&GD	T-CS	F&S	III	
CO2	Describe differential diagnosis of Syphilis and Gonorrhoea	CC	NK	KH	FC	T-CS	F&S	III	
CO4	Order and interpret relevant investigation of Syphilis and Gonorrhoea	CAP	NK	SH	L&GD,LRI	INT	F&S	III	
Topic 56 56. Krimiroga (Lecture :1 hours, Non lecture: 0 hours)									
CO1	Describe hetu of Krimiroga	CC	NK	KH	L&PPT	O-QZ	F&S	III	
CO1	Enlist bheda of Krimiroga	CK	NK	K	L&PPT	O-QZ	F&S	III	
CO1	Describe samanya lakshana of Krimiroga	CC	NK	KH	L&PPT	O-GAME	F&S	III	
Topic 57 57. Clinical presentation of common parasitic disorders (Lecture :1 hours, Non lecture: 2 hours)									
CO2,CO5	Describe the clinical presentation of Hook worm, Round worm, Thread worm, and Pin worm	CC	DK	KH	L_VC	C-VC	F&S	III	
CO3	Perform relevant examination of clinical presentation of Hook worm, Round worm, Thread worm, and Pin worm	PSY-GUD	DK	SH	L&PPT	INT	F&S	III	
CO4	Order and interpret relevant investigations of clinical presentation of Hook worm, Round worm, Thread worm, and Pin worm	CAP	DK	SH	L&GD,LRI	T-CS	F&S	III	
Topic 58 58. Khalitya & Palitya (Lecture :1 hours, Non lecture: 0 hours)									
CO1	Describe Khalitya and Palitya	CC	NK	KH	L&PPT	O-QZ	F&S	III	

Topic 59 59. Shleepada (Lecture :1 hours, Non lecture: 0 hours)									
CO1	Describe nidana and samprapti of Shleepada	CC	NK	KH	L&PPT	M-CHT	F&S	III	
CO1	Enlist bheda of Shleepada	CK	NK	K	L&PPT	QZ	F&S	III	
CO1	Enlist features of Shleepada	CK	NK	K	L&PPT	O-QZ	F&S	III	
Topic 60 60. Tuberculosis (Lecture :1 hours, Non lecture: 2 hours)									
CO2,CO5	Describe the clinical presentation of Tuberculosis	CC	DK	KH	L_VC	INT, C-VC	F&S	III	H-SW
CO3	Perform relevant clinical examination of Tuberculosis	PSY-GUD	DK	SH	L&PPT	INT	F&S	III	
CO4	Order and interpret relevant investigations of clinical presentation of Tuberculosis	CAP	DK	SH	L&GD,LRI	INT	F&S	III	

List of Practicals (Term and Hours)

PRACTICALS (Marks-100)			
S.No	**List of Topics**	**Term**	**Hours**
1	1. Aptopadesha Pareeksha/Prashna Pareeksha	1	10
2	2. Introduction to case sheet. Pratyaksha and Anumana Pareeksha.	1	10
3	3. General clinical and Systemic examination -A	1	20
4	4. General clinical and Systemic examination - B	1	20
5	5. Common Symptomatology of different systems	2	20
6	6. Vyavachedaka nidana/ Differential diagnosis	2	4
7	7. Case presentation	2	40
8	8. Introduction to Diagnostic procedures - Hematology, Biochemistry, Microbiology, Urine, Stool	2	26
9	9. Introduction to Electro Cardio Gram (ECG), Different imaging techniques	2	10
10	10. Introduction to Histopathology	2	4
11	11. Study of Histopathology Specimens	3	4
12	12. Retas pareeksha	3	2
13	13. Pathology practical (Perform/ Observation/ Interpretation)	3	40

Table 4: Learning objectives (Practical)

A4 Course outcome	B4 Learning Objective (At the end of the session, the students should be able to)	C4 Domain/sub	D4 Must to know / desirable to know / Nice to know	E4 Level Does/ Shows how/ Knows how/ Know	F4 T-L method	G4 Assessment (Refer abbreviations)	H4 Formative/ summative	I4 Term	K4 Integration
Topic 1 1. Aptopadesha Pareeksha/Prashna Pareeksha									
CO3,CO5	Perform Aptopadesha pareeksha, Prashna pareeksha or History taking mentioned in Ayurveda and contemporary medical literature for drawing clinical diagnosis and prognosis	PSY-GUD	MK	KH	D_BED	CHK,RK	F&S	I	
CO7,CO8	Adopt and reflect ward ethics and communiction skills while engaging in the process of examination	AFT-RES	MK	SH	SIM	SP,RK	F&S	I	
Topic 2 2. Introduction to case sheet. Pratyaksha and Anumana Pareeksha.									
CO3,CO5	Perform Darshanendriya, Sparshanedriya, Srotrendriya pareeksha mentioned in Ayurveda and contemporary medical literature for drawing clinical diagnosis and prognosis	PSY-GUD	MK	SH	D_BED	P-CASE	F&S	I	
CO5	Perform Ghranendriya, & infer Rasanendriyataha pareeksha mentioned in Ayurveda and contemporary medical literature for drawing clinical diagnosis and prognosis	CAN	MK	KH	SIM	P-CASE,RK	F&S	I	
CO5,CO7	Report the findings of patient through structured case sheet	CC	MK	KH	CD	P-CASE,RK	F&S	I	
CO3,CO5	Perform Nadi pareeksha as per Ayurveda classics for identifying predominance of dosha.	PSY-GUD	MK	SH	D_BED	P-PRF	F&S	I	

Topic 3 3. General clinical and Systemic examination -A									
CO3,CO5	Perform general examination and various systemic examination - General physical examination, Nervous system, Musculo skeletal system, Gastro intestinal system, Respiratory system, Integumentary system, Uro-genital system, Cardiovascular system, etc. (Inspection, Palpation, Percussion, Auscultation)	PSY-GUD	MK	SH	SIM, D_BED	CL-PR,OSCE,RK	F&S	I	
Topic 4 4. General clinical and Systemic examination - B									
CO3,CO5	Interpret the findings of general examination and various systemic examination - General physical examination, Nervous system, Musculo skeletal system, Gastro intestinal system, Respiratory system, Integumentary system, Uro-genital system, Cardiovascular system, etc. (Inspection, Palpation, Percussion, Auscultation)	CAP	MK	SH	SIM	SP,RK	F&S	I	
Topic 5 5. Common Symptomatology of different systems									
CO2,CO5	Describe the causes and mechanism of manifestation of Pain abdomen, Edema, Diarrhea, Dysentery, Dehydration and Constipation, Hiccough, Breathlessness, Cough, Vomiting, Joint pain with or without swelling Differential Diagnosis, Neck and Low back pain radiating to corresponding limb, Hematuria, Stroke in various case scenarios	CC	DK	KH	L_VC	COM	F&S	II	
CO2,CO5	Investigate the causes and mechanism of manifestation of Pain abdomen, Edema, Diarrhea, Dysentery, Dehydration and Constipation, Hiccough, Breathlessness, Cough, Vomiting, Joint pain with or without swelling, Neck and Low back pain radiating to corresponding limb, Hematuria, Stroke in various case scenarios	AFT-RES	DK	SH	IBL,PBL	INT	F&S	II	
Topic 6 6. Vyavachedaka nidana/ Differential diagnosis									

CO5	Infer diagnosis and prognosis based on a given clinical scenario	CAN	MK	KH	PBL, CD	SP	F&S	II	
CO5	Apply hypothetic-deductive model of clinical reasoning, Pattern recognition model, dual process diagnostic reasoning model, pathway for clinical reasoning model, integrative model of clinical reasoning model, model of diagnostic reasoning strategies in primary care for clinical diagnosis	CAP	DK	SH	SIM, CD	INT,SP	F&S	II	
CO5	Apply intuitive and analytical approach in clinical decision making	CAP	DK	SH	PBL,SIM,CD	SP	F&S	II	
CO5	Perform clinical diagnosis using these clinical reasoning models	PSY-GUD	DK	SH	SIM, CD	SP	F&S	II	
Topic 7 7. Case presentation									
CO5,CO7	Demonstrate case presentation skills	PSY-GUD	MK	SH	L_VC,D_BED	P-CASE,CL-PR	F&S	II	
Topic 8 8. Introduction to Diagnostic procedures - Hematology, Biochemistry, Microbiology, Urine, Stool									
CO4,CO5,CO6	Order and interpret Diagnostic procedures - Haematology, Biochemistry, Microbiology, Urine, and Stool.	CAP	MK	SH	PBL, LRI	T-CS	F&S	II	
CO3	Suggest patient's preparation for Diagnostic procedures - Haematology, Biochemistry, Microbiology, Urine, and Stool	AFT-RES	MK	SH	L&PPT	SP	F&S	II	
CO3	Perform sample collection for Diagnostic procedures - Haematology, Biochemistry, Microbiology, Urine, and Stool	PSY-GUD	MK	SH	SIM	SP,RK	F&S	II	
Topic 9 9. Introduction to Electro Cardio Gram (ECG), Different imaging techniques									
CO4,CO5,CO	Order and interpret given report for Electro Cardio Gram (ECG)	CAP	DK	SH	L&PP	P-ID,CL-PR	F&S	II	

6	and different imaging techniques				T,XRay				
CO3	Suggest patient's preparation for Electro Cardio Gram (ECG) and different imaging techniques	AFT-RES	DK	SH	L&PPT	INT,SP	F&S	II	
Topic 10 10. Introduction to Histopathology									
CO4,CO5,CO6	Order and interpret tests for Histopathology specimens	CAP	NK	SH	LRI	INT	F&S	III	
Topic 11 11. Study of Histopathology Specimens									
CO4,CO5	Distinguish and describe prepared histopathology specimens of Lung and trachea/ Blood, Spleen and lymph/ Heart and vessels/ Glands/ Liver (Provide normal and abnormal slides to distinguish while deomonstration and spotting)	AFT-RES	NK	SH	D_L	P-ID	F&S	III	
Topic 12 12. Retas pareeksha									
CO1,CO5	Describe and interpret retas pareeksha	CC	DK	KH	D_L	INT	F&S	III	
Topic 13 13. Pathology practical (Perform/ Observation/ Interpretation)									
CO4,CO5,CO6	Order and interpret Hb, RBC Count, WBC count, Haematocrit, Platelet count, Differential count, RBC indices and ESR* - Haematology Analyser through Flow cytometry technique	CAP	MK	SH	CBL	INT,RK	F&S	III	
CO3	Perform Hb, RBC Count, WBC count, Haematocrit, Platelet count, Differential count, RBC indices procedure through - Haematology Analyser or Cell counter through Flow cytometry technique	PSY-GUD	MK	SH	PT	P-PRF	F&S	III	
CO4,CO5,CO6	Order and interpret Urine physical examination (Appearance, colour, odour)	CAP	MK	SH	LRI	INT	F&S	III	

CO3	Perform Urine physical examination (Appearance, colour, odour) through Visual method	PSY-GUD	MK	SH	CBL, PT	P-PRF	F&S	III	
CO4,CO5,CO6	Order and interpret Urine physical and chemical examination (Urine specific gravity, Urine-ph, Sugar, Albumin, Bile pigment, Bile salt, Occult blood, Ketone, Urobilinogen) - Multistix (Urine test strips)	CAP	MK	SH	CBL, LRI	INT,RK	F&S	III	
CO3	Perform Urine physical and chemical examination (Urine specific gravity, Urine-ph, Sugar, Albumin, Bile pigment, Bile salt, Occult blood, Ketone, Urobilinogen) - Multistix (Urine test strips) (Create or simulate abnormal samples to demonstrate positive results)	PSY-GUD	MK	SH	PRA	P-PRF	F&S	III	
CO4,CO5,CO6	Order and interpret Urine Microscopic Examination (Epithelial cells, RBCs, Leukocytes, Casts, Crystals) - Light microscopy on centrifuged sediment	CAP	MK	SH	CBL, LRI	INT	F&S	III	
CO3	Perform Urine Microscopic Examination (Epithelial cells, RBCs, Leukocytes, Casts, Crystals by Light microscopy on centrifuged sediment)	PSY-GUD	MK	SH	PRA	P-PRF	F&S	III	
CO4,CO5,CO6	Order and interpret Liver Function Test (LFT) (Total Bilirubin, Direct – indirect bilirubin, SGOT, SGPT, ALK Phosphates, T Protein, Albumin, Globulin, A/G Ratio) -Semi-automated/ fully automated biochemical analyser through Photometry	CAP	NK	SH	CBL, LRI	INT	F&S	III	
CO2	Describe Liver Function Test (LFT) (Total Bilirubin, Direct – indirect bilirubin, SGOT, SGPT, ALK Phosphates, T Protein, Albumin, Globulin, A/G Ratio) procedure through demonstration	CC	DK	KH	D_L	INT	F&S	III	

	- Semi-automated/ fully automated biochemical analyser through Photometry								
CO2	Explain the principle and mechanism of functioning of biochemical analyzer	CC	DK	KH	D_L	QZ	F&S	III	
CO4,CO5,CO6	Order and interpret Renal Function Test (RFT) (Urea, Creatinine, Uric acid) - Semi-automated/ fully automated biochemical analyser through Photometry	CAP	MK	SH	CBL, LRI	INT,RK	F&S	III	
CO4,CO5,CO6	Order and interpret Diabetic profile (Blood Glucose-FBS, PPBS, RBS. HbA1C, Insulin, C-peptide) - Semi-automated/ fully automated biochemistry analyser/ ELISA reader through Photometry/ immunoturbidometry/ELISA Technique	CAP	MK	SH	CBL, LRI	INT,RK	F&S	III	
CO4,CO5,CO6	Order and interpret Thyroid profile (TSH, T3, T4, F T3, F T4) - ELISA Reader/ CLIA through ELISA/ CLIA Technique	CAP	MK	KH	CBL, LRI	INT	F&S	III	
CO2	Describe Thyroid profile (TSH, T3, T4, F T3, F T4) procedure through demonstration - ELISA Reader/ CLIA through ELISA/ CLIA Technique	CAP	DK	KH	D_L	QZ	F&S	III	
CO4,CO5,CO6	Order and interpret Lipid profile (Cholesterol, HDL, LDL, TG) - Semi-automated/ fully automated biochemical analyser through Photometry	CAP	MK	SH	CBL, LRI	INT,RK	F&S	III	
CO4,CO5,CO6	Order and interpret Peripheral smear (Malaria, Microfilaria) - Microscopy through Leishmans staining	CAP	MK	SH	CBL, LRI	INT,RK	F&S	III	
CO2	Describe Peripheral smear (Malaria, Microfilaria) procedure through demonstration - Microscopy through Leishmans staining	CC	DK	KH	D_L	QZ	F&S	III	
CO4,CO5,CO6	Order and interpret RA factor (qualitative), WIDAL (qualitative), VDRL (qualitative), ASO (qualitative) and CRP (qualitative) - Microscopy (if required) through Latex agglutination/	CAP	MK	SH	CBL, LRI	INT,RK	F&S	III	

	Turbidometry								
CO3	Perform RA factor (qualitative), WIDAL (qualitative), VDRL (qualitative), ASO (qualitative) and CRP (qualitative) - Microscopy (if required) through Latex agglutination/ Turbidometry	PSY-GUD	MK	SH	PRA	P-PRF	F&S	III	
CO4,CO5,CO6	Order and interpret Stool examination (Colour, Consistency) - Visual method	CAP	NK	SH	CBL, LRI	INT,RK	F&S	III	
CO2	Describe Stool examination (Colour, Consistency) - Visual method	CC	DK	KH	D_L	INT	F&S	III	
CO4,CO5,CO6	Order and interpret Stool examination (Ova , Cyst, Pus cells) - Microscopy through Wet smear (saline and iodine)	CAP	NK	SH	CBL, LRI	INT,RK	F&S	III	
CO2	Describe Stool examination (Ova , Cyst, Pus cells) - Microscopy through Wet smear (saline and iodine)	CC	DK	KH	D_L	INT	F&S	III	
CO4,CO5,CO6	Order and interpret Semen examination (Colour, Liquefaction, Viscosity) - Visual method	CAP	DK	SH	CBL, LRI	INT,RK	F&S	III	
CO2	Describe Semen examination (Colour, Liquefaction, Viscosity) procedure through demonstration - Visual method	CC	DK	KH	D_L	INT	F&S	III	
CO4,CO5,CO6	Order and interpret Semen examination (Sperm count, Motility, Morphology) - Microscopy through Cytometry/ Wet smear/ stained smear	CAP	DK	SH	CBL, LRI	INT,RK	F&S	III	
CO2	Describe Semen examination (Sperm count, Motility, Morphology) procedure through demonstration - Microscopy through Cytometry/ Wet smear/ stained smear	CC	DK	KH	D_L	INT,COM	F&S	III	
CO4,CO5,CO6	Order and interpret BT, CT, Prothrombin Time - Coagulometer	CAP	MK	SH	CBL, LRI	INT,RK	F&S	III	

Table 4a: List of Practical

S.No	Name of practical	Term	Activity	Practical hrs
1	1. Aptopadesha Pareeksha/Prashna Pareeksha	1	History taking/ Ward ethics/ Communication skills	10
2	2. Introduction to case sheet. Pratyaksha and Anumana Pareeksha.	1	Darshanendriya, Sparshanedriya, Srotrendriya & Ghranendriya & Rasanendriyataha pareeksha. General principle of systemic examination – Inspection, Palpation, Percussion, Auscultation	10
3	3. General clinical and Systemic examination -A	1	Demonstration on patients and using simulators, software or applications	20
4	4. General clinical and Systemic examination - B	1	General and Systemic examination	20
5	5. Common Symptomatology of different systems	2	Pain abdomen, Edema, Diarrhea, Dysentery, Dehydration and constipation, Hiccough, Breathlessness, Cough, Vomiting, Joint pain with or without swelling Differential Diagnosis, Neck and Low back pain radiating to corresponding limb, Hematuria, Stroke Differential Diagnosis	20
6	6. Vyavachedaka nidana/ Differential diagnosis	2	Clinical reasoning models	4
7	7. Case presentation	2	Demonstrating and presenting steps of clinical diagnosis	40
8	8. Introduction to Diagnostic procedures - Hematology, Biochemistry, Microbiology, Urine, Stool	2	A. Order an investigation B. Patient’s preparation C. Sample collection	26
9	9. Introduction to Electro Cardio Gram (ECG), Different imaging techniques	2	Order and interpret reports related to ECG and Diagnostic imaging	10
10	10. Introduction to Histopathology	2	Order and Interpret	4

11	11. Study of Histopathology Specimens	3	Prepared histopathology specimens to be demonstrated, observed and studied (Lung and trachea/ Blood, Spleen and lymph/ Heart and vessels/ Glands/ Liver)	4
12	12. Retas pareeksha	3	Interpret observations derived from reto pareeksha	2
13	13. Pathology practical (Perform/ Observation/ Interpretation)	3	13.1 Hematology (Discipline) - Hemogram (Profile) 13. 2 Clinical pathology (Discipline) - Urine Physical Examination (Profile) 13. 3 Clinical pathology (Discipline) - Urine Physical and Chemical Examination (Profile) 13. 4 Clinical pathology (Discipline) - Urine Microscopic Examination (Profile) 13. 5 Clinical biochemistry (Discipline) - Liver Function Test (LFT) (Profile) 13. 6 Clinical biochemistry (Discipline) - Renal Function Test (RFT) (Profile) 13. 7 Clinical biochemistry (Discipline) - Diabetic profile (Profile) 13. 8 Clinical biochemistry (Discipline) - Thyroid profile (Profile) 13. 9 Clinical biochemistry (Discipline) - Lipid profile (Profile) 13. 10 Clinical Pathology/ Haematology (Discipline) - Peripheral Smear (Profile) 13. 11 Serology (Discipline) - RA Factor/ WIDAL (Profile) 13. 12 Clinical Pathology (Discipline) - Stool examination (Profile) 13. 13 Clinical Pathology (Discipline) - Stool examination (Profile) 13. 14 Clinical Pathology (Discipline) - Semen examination (Profile) 13. 15 Serology (Discipline) - Coagulation test (Profile)	40
			Total Hr	**210**

Activity

CO	Topic name	Activity Details	Hours#
CO1,CO2,CO3,CO4 ,CO6,CO7,CO8	1. Assessment of Dosha Vikriti: A. Nidana (Vyadhi janaka hetu) B. Agni bheda and Vikriti C. Dosha Vriddhi, Kshaya and Dushta Karma, Samsargaja, Sannipataja. D. Dosha swabhava - Nityasamshleshita (Leena) dosha and Parichedita dosha E. Paridhavamana dosha	Survey : After the completion of the topic the students are instructed to identify: The contemporary etiologies for the nidana or hetu are mentioned in various contexts as a part of case diagnosis. Identify Dosha Vriddhi, Kshaya and Dushta Karma, Samsargaja, Sannipataja features as a part of Case diagnosis. Minimum - 5 cases	6
CO1,CO2	2. Dhatu PakaA. Ojodusti lakshana B. Asatmya - Immune pathology, C. Cell Injury and Cellular Adaptations D. Inflammation E. Hemodynamic disorders F. Neoplasia	Creating video presentations (5 to 7 minutes): After understanding the basic concepts: Group of 5 students together are instructed to prepare one quality educational video with current research updates in the field in a structured format and submit the same to the instructor. Topics of Ayurveda and various contemporary learning objectives defined can be provided for the same. The topics for video presentations should be selected from the subtopics, it can be regarding a specific point or research update or collection	5

		and summary of scientific articles, etc. which will be assisting in clinical practice. The video presentations should be submitted to create a repository and presented to the department.	
CO2	3. Infection and Nutritional disorders	Class presentations: Group activity with self-directed learning: Students are instructed to compile the subtopics given to the group. Prepare a PPT presentation and present it in class with the groups. 10 min. for presentation and 5 min for question answers for each group. Topics to be covered in the presentation: A) The detailed knowledge of specific organisms, infectious disease symptomatology, and diagnostic procedures with recent advancements and challenges in diagnosis. B) Nutritional disorders with the thought of understanding the spectrum of signs and symptoms with Ayurveda literature, methods to diagnose in contemporary science, complications, etc. Monitored by instructors or mentors assigned for each group.	2
CO6	4. Digital health and Artificial intelligence in the context of Roganidana	Poster making: After a basic understanding of the topic, the students are instructed to prepare Posters regarding the use of Information and Communication Technology and other recent digital developments in understanding diagnosis, prognosis, and developing repositories related to morbidities or Roganidana Evum Vikriti Vigyan in the current era aiding for academics and	1

		clinical practice.Similarly, the implementation of artificial intelligence in diagnosis and prognosis also can be prepared.	
CO1,CO2,CO3,CO4 ,CO6,CO7,CO8	5. Methods of Rogi pareeksha	Demonstration bed side: After understanding the core concepts of pareeksha the student will be Demonstrated regarding various pareekshas before performing the same in practical session. The students are supposed to observe the same, receive, understand and imitate the methods demonstrated. Students will be assigned with the mentioned topics as a part of the activity by the instructor in minimum 5 simulated patients or patients.	5
CO6	6. Vyadhinamakarana	Demonstration: The instructor will be demonstrating the operations of the NAMASTE (National AYUSH Morbidity and Standardized Terminologies Electronic Portal) portal. The student should observe and implement the same for reporting terminologies or diagnosis.The instructor can give modified data indicating the disease diagnosis with masked patient details for mentioning the allotted codes of diseases or conditions from NAMASTE portal and WHO international standard terminologies on Ayurveda or A list of common diseases prevailing in the area can be given to the students to search the portal and mention the codes by themselves. Students can be assigned with any of the mentioned topics as a part of the activity by the instructor.	1

CO2,CO3,CO6,CO7,CO8	7. Perform relevant clinical examinations in the following disorders: Gastrointestinal disorders: Ulcerative and Non-ulcerative dyspepsia, Irritable Bowel Syndrome, Inflammatory Bowel Diseases. Urinary disorders: Urinary Tract Infection, Prostatomegaly, Nephrotic syndrome, Nephritic syndrome, Acute Kidney Injury and Chronic Kidney Disease. Respiratory disorders: Pneumonia, Chronic Obstructive Pulmonary Disease, Pleural effusion and Bronchiectasis. Measles, Chickenpox and herpes zoster, Hand foot mouth disease, Rubella, Malaria, Filariasis, Influenza, Dengue, Leptospirosis, Chikungunya, Typhoid, and other common regional disorders presenting with fever. Coronary Artery Disease (Ischemic Heart Disease, and Myocardial Infarction) and Congestive cardiac failure. Hepatobiliary diseases - Liver cirrhosis, Alcoholic and Non - Alcoholic Liver Diseases, Hepatitis, Jaundice, and Ascites.	Demonstration bedside (Simulated patients): The students will be instructed to observe the bedside demonstration activity by the instructor, followed by students imitating or performing the same activity relevant to the condition associated. The case study will be written in the activity book.	8

	Allergic disorders - Eczema, Urticaria; Squamous lesions - Psoriasis, Lichen planus; Bullous lesion – Pemphigus and Pemphigoid. Mycotic skin diseases. Leprosy. Vitiligo. Cellulitis. Hypothyroidism and hyperthyroidism. Obesity. Diabetes Mellitus and Pancreatitis. Common neurologic diseases: Parkinson's disease, Stroke, Bell's Palsy, Motor Neuron Disease, Transverse myelitis, Epilepsy (Organic) Common Spine disorders: Lumbago- Sciatica syndrome, Brachial neuralgia, Cervical and Lumber Spondylosis. Diseases of bone and Joints - Osteoarthritis, Osteoporosis. Frozen Shoulder, Calcaneal spur/ Plantar fasciitis, Tennis elbow, Carpel tunnel syndrome. Muscular diseases - Muscular Dystrophy. Rheumatic fever, Rheumatoid arthritis, SLE, Ankylosing spondylitis, Gout. Mental status examination for Depression, Anxiety neurosis and Epilepsy			

	(Non - organic). Common parasitic infestations: Hookworm, Roundworm, Threadworm, and Pinworm.		
CO4,CO6,CO7,CO8	8. Order and interpret relevant investigations with the clinical correlation of the following disorders: Gastrointestinal disorders: Ulcerative and Non-ulcerative dyspepsia, Irritable Bowel Syndrome, Inflammatory Bowel Diseases. Urinary Tract Infection, Prostatomegaly, Nephrotic syndrome, Nephritic syndrome, Acute Kidney Injury, and Chronic Kidney Disease. Pneumonia, Chronic Obstructive Pulmonary Disease, Pleural effusion, and Bronchiectasis. Measles, Chicken pox and Herpes zoster, Hand foot mouth disease, Rubella, Malaria, Filariasis, Influenza, Dengue, Leptospirosis, Chikungunya, Typhoid, and other common regional disorders presenting with fever. Anaemia, Nutritional anaemia, Thalassemia, Sickle cell anaemia, Leukaemia, and	Lab report interpretation: Students will be given a clinical scenario or a case or report in the respective training hour. Based on the training given the students are expected to draw a provisional diagnosis based on the Lab report interpretation. The same has to be recorded in the activity book	8

	Thrombocytopenia. Coronary Artery Disease (Ischemic Heart Disease, and Myocardial Infarction) and Congestive cardiac failure. Hepatobiliary diseases - Liver cirrhosis, Alcoholic and Non - Alcoholic Liver Diseases, Hepatitis, Jaundice, and Ascites. Allergic disorders - Eczema, Urticaria; Squamous lesions - Psoriasis, Lichen planus; Bullous lesion – Pemphigus and Pemphigoid. Mycotic skin diseases. Leprosy. Vitiligo. Cellulitis. Hypothyroidism and hyperthyroidism. Obesity. Diabetes Mellitus and Pancreatitis. Common neurologic diseases: Parkinson’s disease, Stroke, Bell’s Palsy, Motor Neuron Disease, Transverse myelitis, Epilepsy (Organic). Common Spine disorders: Lumbago - Sciatica syndrome, Brachial neuralgia, Cervical and Lumber Spondylosis. Diseases of bone and Joints - Osteoarthritis, Osteoporosis. Frozen Shoulder, Calcaneal spur/ Plantar fasciitis, Tennis elbow, Carpel tunnel syndrome.			

	Muscular diseases - Muscular Dystrophy. Rheumatic fever, Rheumatoid arthritis, SLE, Ankylosing spondylitis, Gout. Sexual dysfunction and Infertility.Syphilis and Gonorrhoea. Parasitic infestations: Hookworm, Roundworm, Threadworm, and Pinworm. Tuberculosis		
CO1,CO2	9. Differential diagnosis: Differentiate between Atisara and Pravahika. Differentiate Atisara and Grahani Roga. Differentiate Grahani dosha and Grahani Roga. Describe the differential diagnosis of Ulcerative and Non-ulcerative dyspepsia, Irritable Bowel Syndrome, and Inflammatory Bowel Diseases. Enlist conditions of Mutra shoshana (Kshaya and Aukasada) and Mutra pratihanyate (Avarodha) among different types of Mutraghata. Describe different types of Mutraghata.	Problem-Based Learning: The students will be grouped for PBL sessions with a specific topic from the topic list given. At the end of the session, the groups will present in class. Peer learning will also be achieved with this activity.	10

	Differentiate Mootrakrichra and Mootraghata. Describe the differential diagnosis of Pneumonia, Chronic Obstructive Pulmonary Disease, Pleural effusion, and Bronchiectasis. Describe the differential diagnosis of Measles, Chicken pox and Herpes zoster, Hand foot mouth disease, Rubella, Malaria, Filariasis, Influenza, Dengue, Leptospirosis, Chikungunya, Typhoid and other common regional disorders presenting with fever. Describe the differential diagnosis of Anaemia, Nutritional anemia, Thalassemia, Sickle cell anemia, Leukaemia, and Thrombocytopenia. Describe the differential diagnosis of Coronary Artery Disease (Ischemic Heart Disease, and Myocardial Infarction) and Congestive cardiac failure. Describe the differential diagnosis of Hepatobiliary diseases - Liver cirrhosis, Alcoholic and Non - Alcoholic Liver Diseases, Hepatitis, Jaundice, and Ascites. Describe the differential diagnosis of Hypothyroidism and hyperthyroidism.		

	Describe the differential diagnosis of Obesity. Describe the differential diagnosis of Diabetes Mellitus and Pancreatitis. Describe the differential diagnosis of Common neurologic diseases: Parkinson’s disease, Stroke, Bell’s Palsy, Motor Neuron Disease, Transverse myelitis, Epilepsy (Organic), and Common Spine disorders: Lumbago- Sciatica syndrome, Brachial neuralgia, Cervical, and Lumber Spondylosis. Describe the differential diagnosis of Diseases of bone and Joints - Osteoarthritis, Osteoporosis. Frozen Shoulder, Calcaneal spur/ Plantar fasciitis, Tennis elbow, Carpel tunnel syndrome, and Muscular diseases - Muscular Dystrophy. Describe the differential diagnosis of Rheumatic fever, Rheumatoid arthritis, SLE, Ankylosing spondylitis, and Gout. Describe differential diagnosis of Sexual dysfunction and Infertility. Describe differential diagnosis of Syphilis and Gonorrhoea. Describe the differential			

	diagnosis of clinical presentation of Hookworm, Roundworm, Threadworm, and Pinworm. Describe the differential diagnosis of the clinical presentation of Tuberculosis.		
CO2,CO5	10. Clinical features - Role plays in learning: Describe the clinical features of Ulcerative and Non-ulcerative dyspepsia, Irritable Bowel Syndrome, and Inflammatory Bowel Diseases. Describe the clinical features of Urinary Tract Infection, Prostatomegaly, Nephrotic syndrome, Nephritic syndrome, Acute Kidney Injury, and Chronic Kidney Disease. Describe the clinical features of Pneumonia, Chronic Obstructive Pulmonary Disease, Pleural effusion, and Bronchiectasis. Describe the clinical features of Measles, Chicken pox and Herpes zoster, Hand foot mouth disease, Rubella, Malaria, Filariasis, Influenza, Dengue, Leptospirosis, Chikungunya, typhoid, and other common regional disorders presenting with fever.	Role plays: Role plays are an effective method of teaching to create a real-world scenario in a controlled manner. In this certain group of students will be trained for pre-class preparation regarding a disease or condition to be presented in the class in front of small cluster groups of students. Further, the groups are asked to interact with the performing student to understand more about a condition and use their clinical acumen to diagnose the condition moderated by an instructor.	10

	Describe the complications of Measles, Chicken pox and Herpes zoster, Hand foot mouth disease, Rubella, Malaria, Filariasis, Influenza, Dengue, Leptospirosis, Chikungunya, Typhoid, and other common regional disorders presenting with fever. Describe the clinical features of Anaemia, Nutritional anemia, Thalassemia, Sickle cell anemia, Leukaemia, and Thrombocytopenia. Describe the clinical features of Coronary Artery Disease (Ischemic Heart Disease, and Myocardial Infarction) and Congestive cardiac failure. Describe the clinical features of Hepatobiliary diseases - Liver cirrhosis, Alcoholic and Non - Alcoholic Liver Diseases, Hepatitis, Jaundice, and Ascites. Describe the clinical features of Hypothyroidism and hyperthyroidism. Describe the clinical features of Diabetes Mellitus and Pancreatitis. Describe the clinical features of Common neurologic diseases: Parkinson’s disease, Stroke, Bell’s Palsy,			

	Motor Neuron Disease, Transverse myelitis, Epilepsy (Organic), and Common Spine disorders: Lumbago- Sciatica syndrome, Brachial neuralgia, Cervical, and Lumber Spondylosis. Describe the clinical features of Diseases of bone and Joints - Osteoarthritis, Osteoporosis. Frozen Shoulder, Calcaneal spur/ Plantar fasciitis, Tennis elbow, Carpel tunnel syndrome, and Muscular diseases - Muscular Dystrophy. Describe the clinical features of Rheumatic fever, Rheumatoid arthritis, SLE, Ankylosing spondylitis, and Gout.		
CO4,CO6,CO8	11. Field visits: Visit to Pathology laboratory and Diagnostic imaging center.	Visit: Students are instructed to visit at least one pathology laboratory and one imaging center; observe the procedures followed.Record the observations and submit the report to the instructor.	10

Hours indicated are included in calculations of Table 3 and 4

Table 5- Teaching learning method

Sr No	Teaching learning methods in the course	No of Activities
1	Lecture	2
2	Lecture with Power point presentation	222
3	Lecture & Group Discussion	133

4	Lecture with Video clips	45
5	Discussions	16
6	Brainstorming	3
7	Inquiry-Based Learning	4
8	PBL	14
9	CBL	9
10	Project-Based Learning	16
11	Team project work	2
12	Flipped classroom	4
13	Blended Learning	3
14	Edutainment	2
15	Simulation	1
16	Role plays	10
17	Self-directed learning	6
18	Problem solving method	1
19	Recitation	31
20	Tutorial	3
21	Presentations	3
22	X ray identification	2
23	Case diagnosis	3
24	Lab report interpretation	18
25	Demonstration	2
26	Demonstration bedside	15
27	Demonstration Lab	1

These are overall teaching learning methods listed in Table 3 and 4. Teachers can select the best possible method amongst the given methods as per objective, available time etc.

Table 6: Assessment Summary: Assessment is subdivided in A to H points

6 A-Number of Papers and Marks Distribution

Subject Code	Papers	Theory	Practical/Clinical Assessment					
			Practical	Viva	Elective	IA	Sub	Grand

							Total	Total
AyUG-RN	2	200	100	70	-	30	200	400

6 B - Scheme of Assessment (formative and Summative)

PROFESSIONAL COURSE	DURATION OF PROFESSIONAL COURSE		
	First Term (1-6 Months)	**Second Term (7-12 Months)**	**Third Term (13-18 Months)**
Second	3 PA & First TT	3 PA & Second TT	3 PA & UE**

PA: Periodical Assessment; **TT:** Term Test; **UE:** University Examinations.

** University Examination shall be on entire syllabus

6 C - Calculation Method for Internal assessment Marks

TERM	PERIODICAL ASSESSMENT*					TERM TEST**	TERM ASSESSMENT	
	A 3	B	C	D	E	F	G	H
	1 (15 Marks)	2 (15 Marks)	3 (15 Marks)	Average (A+B+C/ 3)	Converted to 30 Marks (D/15*30)	Term Test (Marks converted to 30)	Sub Total _/60 Marks	Term Ass essment (…./30)
FIRST							E+F	(E+F)/2
SECOND							E+F	(E+F)/2
THIRD						NIL		E
Final IA	Average of Three Term Assessment Marks as Shown in 'H' Column.							
	Maximum Marks in Parentheses *Select an Evaluation Method which is appropriate for the objectives of Topics from the Table 6 D for Periodic assessment. Conduct 15 marks assessment and enter marks in A, B, and C. ** Conduct Theory (100 Marks)(MCQ(20*1 Marks), SAQ(8*5), LAQ(4*10)) and Practical (100 Marks) Then convert to 30 marks.							

6 D - Evaluation Methods for Periodical Assessment

S. No	Evaluation Methods
1	Activities Indicated in Table 3 - Column G3 as per Indicated I, II or III term in column I3

Evaluation Methods in MSE

1. Practical / Clinical Performance
2. Viva Voce, MCQs, MEQ (Modified Essay Questions/Structured Questions)
3. Open Book Test (Problem Based)
4. Summary Writing (Research Papers/ Samhitas)
5. Class Presentations; Work Book Maintenance
6. Problem Based Assignment
7. Objective Structured Clinical Examination (OSCE), Objective Structured Practical Examination (OPSE), Mini Clinical Evaluation Exercise (Mini-CEX), Direct Observation of Procedures (DOP), Case Based Discussion (CBD)
8. Extra-curricular Activities, (Social Work, Public Awareness, Surveillance Activities, Sports or Other Activities which may be decided by the department).
9. Small Project etc.

6 E Question Paper Pattern

II PROFESSIONAL BAMS EXAMINATIONS
AyUG-RN
PAPER-1
Time: 3 Hours Maximum Marks: 100
INSTRUCTIONS: All questions compulsory

		Number of Questions	**Marks per question**	**Total Marks**
Q 1	MULTIPLE CHOICE QUESTIONS (MCQ)	20	1	20
Q 2	SHORT ANSWER QUESTIONS (SAQ)	8	5	40
Q 3	LONG ANSWER QUESTIONS (LAQ)	4	10	40
				100

Similar for Paper II

6 F Distribution of theory examination

Paper 1 Fundamental Principles of Vikriti Vigyan						
Sr. No	**A List of Topics**	**B Term**	**C Marks**	**MCQ (1 Mark)**	**SAQ (5 Marks)**	**LAQ (10 Marks)**
1	**1. Roga nidana – Pathophysiology and clinical diagnosis**	1	43	No	Yes	No
2	**2. Pareeksha**	1		Yes	Yes	Yes
3	**3. Methods of Rogi pareeksha**	1		No	Yes	Yes
4	**4. Sapeksha nidana - Vyavacchedaka nidana**	1		No	Yes	Yes
5	**5. Upashaya/ Anupashaya**	1		Yes	Yes	No
6	**6. Dosha Vikriti**	1		Yes	Yes	Yes
7	**7. Doshagati and Rogamarga**	1		Yes	Yes	Yes
8	**8. Srotodushti**	1		Yes	Yes	Yes
9	**9. Concept of Ama**	1		Yes	Yes	Yes
10	**10. Assessment of Ama**	1		Yes	Yes	No
11	**11. Sthana samshraya – Poorvaroopa**	1	49	No	Yes	Yes
12	**12. Dushya dushti**	1		Yes	Yes	Yes
13	**13. Samprapti**	1		No	Yes	Yes
14	**14. Rupa**	1		Yes	Yes	Yes
15	**15. Vyadhinamakarana**	1		Yes	Yes	No
16	**16. Vyadhi**	1		Yes	Yes	Yes

17	**17. Ashtanindita (Endocrine disorders)**	1		Yes	Yes	No
18	**18. Janapadodhwamsa vikara (Pandemic disorders)**	1		Yes	Yes	No
19	**19. Nidanarthakara Vyadhi, Vyadhisankara**	1		Yes	Yes	No
20	**20. Vyadhikshamatva**	1		Yes	Yes	Yes
21	**21. Rogi bala Pareeksha**	1		Yes	Yes	No
22	**22. Dhatu Paka**	1		Yes	Yes	Yes
23	**23. Infection and Nutritional disorders**	1	8	Yes	Yes	No
24	**24. Upadrava**	2		Yes	Yes	No
25	**25. Arishta**	2		Yes	No	No
26	**26. Vyadhi bala pareeksha**	2		Yes	Yes	No
27	**27. Sadhyasadhyatva – Prognosis**	2		Yes	Yes	No
28	**28. Digital health and Artificial intelligence in the context of Roganidana**	2		Yes	No	No
Total Marks			**100**			

Paper 2 Vyadhi Vigyan, contemporary understanding and updates						
Sr. No	**A List of Topics**	**B Term**	**C Marks**	**MCQ (1 Mark)**	**SAQ (5 Marks)**	**LAQ (10 Marks)**
29	**1. Agnimandya – Ajeerna, Anaha, Adhmana, Atopa**	2	43	Yes	Yes	Yes
30	**2. Chhardi**	2		Yes	Yes	No

31	**3. Amlapitta**	2		Yes	Yes	No
32	**4. Shoola**	2		Yes	Yes	Yes
33	**5. Atisara, and Pravahika**	2		Yes	Yes	Yes
34	**6. Grahani**	2		No	Yes	Yes
35	**7. Visuchika, Alasaka, Vilambika**	2		Yes	Yes	No
36	**8. Common GIT diseases**	2		Yes	Yes	No
37	**9. Mutrakrichhra**	2		Yes	Yes	No
38	**10. Mutraghata**	2		Yes	Yes	No
39	**11. Common Urinary diseases**	2		Yes	Yes	No
40	**12. Hikka**	2		Yes	Yes	No
41	**13. Shwasa**	2		Yes	Yes	Yes
42	**14. Kasa**	2		Yes	Yes	Yes
43	**15. Rajayakshma & Shosha**	2		Yes	Yes	No
44	**16. Common lung disorders**	2		Yes	Yes	No
45	**17. Jwara**	2		Yes	Yes	Yes
46	**18. Masurika – Romantika**	2		Yes	No	No
47	**19. Fever**	2		Yes	Yes	No
48	**20. Pandu**	2		No	Yes	Yes
49	**21. Raktapitta**	2	25	Yes	Yes	Yes

50	**22. Hematopoietic diseases**	2		Yes	Yes	No
51	**23. Hridroga**	2		Yes	Yes	No
52	**24. Shotha**	2		No	Yes	Yes
53	**25. Cardiovascular disorders**	2		Yes	Yes	No
54	**26. Kamala**	2		No	Yes	Yes
55	**27. Udara Roga**	2		No	Yes	Yes
56	**28. Hepatobiliary diseases**	2		Yes	Yes	No
57	**29. Kushtha - Maha Kushtha & Kshudra Kushtha (According to Charaka)**	3		No	Yes	Yes
58	**30. Sheetapitta**	3		No	Yes	Yes
59	**31. Shwitra**	3		No	Yes	Yes
60	**32. Visarpa**	3		No	Yes	Yes
61	**33. Skin diseases**	3		Yes	Yes	No
62	**34. Galaganda**	3		Yes	No	No
63	**35. Thyroid disorders**	3		Yes	Yes	No
64	**36. Sthoulya – Karshya**	3	32	No	Yes	Yes
65	**37. Obesity**	3		Yes	Yes	No
66	**38. Prameha**	3		No	Yes	Yes
67	**39. Diabetes Mellitus and Pancreatitis**	3		Yes	Yes	No

68	**40. Vatavyadhi**	3	No	Yes	Yes
69	**41. Snayugata vata**	3	No	Yes	Yes
70	**42. Common neurologic and spine disorders**	3	Yes	Yes	No
71	**43. Sandhigatavata and Asthi majja gata vata**	3	No	Yes	Yes
72	**44. Diseases of bone, joints, and muscles**	3	Yes	Yes	No
73	**45. Amavata**	3	No	Yes	Yes
74	**46. Vatarakta**	3	No	Yes	Yes
75	**47. Immunological & Metabolic disorders**	3	Yes	Yes	No
76	**48. Klaibya & Vandhyatva**	3	Yes	No	No
77	**49. Sexual dysfunction and Infertility**	3	Yes	No	No
78	**50. Unmada & Apasmara**	3	Yes	No	No
79	**51. Vishada**	3	Yes	No	No
80	**52. Murchha, and Sanyasa**	3	Yes	No	No
81	**53. Common Psychiatric diseases**	3	Yes	No	No
82	**54. Phiranga and Upadamsha**	3	Yes	No	No
83	**55. Syphilis & Gonorrhoea**	3	Yes	No	No
84	**56. Krimiroga**	3	Yes	No	No
85	**57. Clinical presentation of common parasitic disorders**	3	Yes	Yes	No

86	**58. Khalitya & Palitya**	3		Yes	No	No	
87	**59. Shleepada**	3		Yes	No	No	
88	**60. Tuberculosis**	3					
Total Marks			**100**				

6 G Blue print of paper I & II

Paper No:1		
Question No	**Type of Question**	**Question Paper Format**
Q1	**Multiple choice Questions** **20 Questions** **1 mark each** **All compulsory** **Must know part - 15 MCQ** **Desirable to know - 3 MCQ** **Nice to know part - 2 MCQ**	**1.** 2. Pareeksha **2.** 5. Upashaya/ Anupashaya **3.** 7. Doshagati and Rogamarga **4.** 6. Dosha Vikriti **5.** 8. Srotodushti **6.** 9. Concept of Ama **7.** 12. Dushya dushti **8.** 15. Vyadhinamakarana **9.** 16. Vyadhi **10.** 17. Ashtanindita (Endocrine disorders) **11.** 18. Janapadodhwamsa vikara (Pandemic disorders) **12.** 19. Nidanarthakara Vyadhi, Vyadhisankara **13.** 20. Vyadhikshamatva **14.** 21. Rogi bala Pareeksha **15.** 22. Dhatu Paka **16.** 23. Infection and Nutritional disorders **17.** 27. Sadhyasadhyatva – Prognosis / 24. Upadrava **18.** 25. Arishta **19.** 26. Vyadhi bala pareeksha **20.** 28. Digital health and Artificial intelligence in the context of Roganidana
Q2	**Short answer Questions** **Eight Questions** **5 Marks Each** **All compulsory** **Must know - 7 SAQ** **Desirable to know - 1 SAQ** **No questions on Nice to know**	**1.** 1. Roga nidana – Pathophysiology and clinical diagnosis / 2. Pareeksha **2.** 11. Sthana samshraya – Poorvaroopa / 8. Srotodushti / 12. Dushya dushti / 7. Doshagati and Rogamarga / 6. Dosha Vikriti **3.** 13. Samprapti / 16. Vyadhi / 19. Nidanarthakara Vyadhi, Vyadhisankara / 17. Ashtanindita (Endocrine disorders) / 14. Rupa **4.** 20. Vyadhikshamatva / 21. Rogi bala Pareeksha / 18. Janapadodhwamsa vikara (Pandemic disorders) / 19. Nidanarthakara Vyadhi, Vyadhisankara / 22. Dhatu Paka **5.** 26. Vyadhi bala pareeksha / 27. Sadhyasadhyatva – Prognosis / 24. Upadrava **6.** 23. Infection and Nutritional disorders **7.** 10. Assessment of Ama / 9. Concept of Ama **8.** 5. Upashaya/ Anupashaya

Q3	**Long answer Questions** **Four Questions** **10 marks each** **All compulsory** **All questions on must know. No Questions on Nice to know and Desirable to know**	**1.** 4. Sapeksha nidana - Vyavacchedaka nidana / 3. Methods of Rogi pareeksha / 12. Dushya dushti / 6. Dosha Vikriti / 2. Pareeksha **2.** 11. Sthana samshraya – Poorvaroopa / 14. Rupa **3.** 9. Concept of Ama / 22. Dhatu Paka / 8. Srotodushti / 7. Doshagati and Rogamarga **4.** 20. Vyadhikshamatva / 22. Dhatu Paka
Paper No:2		
Question No	**Type of Question**	**Question Paper Format**
Q1	**Multiple choice Questions** **20 Questions** **1 mark each** **All compulsory** **Must know part - 15 MCQ** **Desirable to know - 3 MCQ** **Nice to know part - 2 MCQ**	**1.** 1. Agnimandya – Ajeerna, Anaha, Adhmana, Atopa / 2. Chhardi **2.** 3. Amlapitta / 4. Shoola / 7. Visuchika, Alasaka, Vilambika **3.** 5. Atisara, and Pravahika / 8. Common GIT diseases **4.** 13. Shwasa / 15. Rajayakshma & Shosha / 12. Hikka / 14. Kasa **5.** 16. Common lung disorders **6.** 11. Common Urinary diseases **7.** 17. Jwara / 19. Fever / 18. Masurika – Romantika **8.** 25. Cardiovascular disorders / 22. Hematopoietic diseases **9.** 28. Hepatobiliary diseases **10.** 33. Skin diseases **11.** 35. Thyroid disorders / 34. Galaganda **12.** 37. Obesity **13.** 39. Diabetes Mellitus and Pancreatitis **14.** 42. Common neurologic and spine disorders **15.** 44. Diseases of bone, joints, and muscles / 47. Immunological & Metabolic disorders **16.** 48. Klaibya & Vandhyatva / 49. Sexual dysfunction and Infertility **17.** 51. Vishada / 50. Unmada & Apasmara **18.** 57. Clinical presentation of common parasitic disorders / 52. Murchha, and Sanyasa **19.** 54. Phiranga and Upadamsha / 55. Syphilis & Gonorrhoea **20.** 57. Clinical presentation of common parasitic disorders / 59. Shleepada / 56. Krimiroga / 60. Tuberculosis

Q2	**Short answer Questions** **Eight Questions** **5 Marks Each** **All compulsory** **Must know - 7 SAQ** **Desirable to know - 1 SAQ** **No questions on Nice to know**	**1.** 5. Atisara, and Pravahika / 1. Agnimandya – Ajeerna, Anaha, Adhmana, Atopa / 2. Chhardi / 8. Common GIT diseases / 6. Grahani / 3. Amlapitta / 4. Shoola / 7. Visuchika, Alasaka, Vilambika **2.** 11. Common Urinary diseases / 9. Mutrakrichhra / 10. Mutraghata **3.** 25. Cardiovascular disorders / 23. Hridroga / 20. Pandu / 17. Jwara / 26. Kamala / 28. Hepatobiliary diseases / 19. Fever / 21. Raktapitta / 22. Hematopoietic diseases / 24. Shotha **4.** 32. Visarpa / 31. Shwitra / 27. Udara Roga / 29. Kushtha - Maha Kushtha & Kshudra Kushtha (According to Charaka) / 33. Skin diseases / 26. Kamala / 28. Hepatobiliary diseases / 30. Sheetapitta **5.** 40. Vatavyadhi / 44. Diseases of bone, joints, and muscles / 43. Sandhigatavata and Asthi majja gata vata / 46. Vatarakta / 42. Common neurologic and spine disorders / 45. Amavata / 41. Snayugata vata / 47. Immunological & Metabolic disorders **6.** 57. Clinical presentation of common parasitic disorders / 60. Tuberculosis **7.** 13. Shwasa / 15. Rajayakshma & Shosha / 12. Hikka / 16. Common lung disorders / 14. Kasa **8.** 39. Diabetes Mellitus and Pancreatitis / 37. Obesity / 38. Prameha
Q3	**Long answer Questions** **Four Questions** **10 marks each** **All compulsory** **All questions on must know. No Questions on Nice to know and Desirable to know**	**1.** 13. Shwasa / 5. Atisara, and Pravahika / 1. Agnimandya – Ajeerna, Anaha, Adhmana, Atopa / 6. Grahani / 4. Shoola / 14. Kasa **2.** 20. Pandu / 17. Jwara / 38. Prameha / 21. Raktapitta / 36. Sthoulya – Karshya / 24. Shotha **3.** 32. Visarpa / 31. Shwitra / 27. Udara Roga / 29. Kushtha - Maha Kushtha & Kshudra Kushtha (According to Charaka) / 26. Kamala / 30. Sheetapitta **4.** 40. Vatavyadhi / 43. Sandhigatavata and Asthi majja gata vata / 46. Vatarakta / 41. Snayugata vata

6 H Distribution of Practical Exam

S.No	Heads	Marks
1	**Spotting/ Identification: (10 Questions X 3 Marks = 30 Marks): (Note: Minimum of one spotting should be kept mandatorily from all the different heads mentioned below)** **X-Ray/ECG/ Clinical sign picture/ Slide/ Diagnostic report/ Causative factors** **X-Ray (Assessment format):** On a given X-Ray film (Any of the below): • Comment on inspiration and rotation (chest), position, penetration or exposure, and artifacts in a given X-Ray film • Find out the abnormal findings or sign that indicates a specific condition (By assessing size, shape, density, and location of structures) – Airway/ Bones and soft tissue/ Cardiac/ Diaphragm/ Effusion/ Gastric bubble/ Hila and mediastinum) **ECG (Assessment format):** On a given Electro Cardio Gram (Any of the below): • Determine and comment on rhythm and rate (Paper and pencil method/ Caliper method/ 10-times method/ 1500 method) • P wave interpretation (Location/ Amplitude/ Duration/ Configuration/ Deflection) • PR interval interpretation (Location and duration) • QRS complex interpretation (Location/ Amplitude/ Duration/ Configuration/ Deflection) • ST segment interpretation (Location and deflection) • T wave interpretation (Location/ Amplitude/ Configuration/ Deflection) **Clinical sign/ image or picture (Assessment format):** On a given image of a patient with sign (Any of the below): • Identify the sign • Possible aetiologies behind the case • Possible investigations for further confirmation of a case • Differential diagnosis • Diagnose the condition or disease associated with the sign **Slide (Assessment format):** Identify and mention the provisional diagnosis of (Any of the below): • Haematology (Peripheral blood smear) • Histopathology (Lung and trachea/ Blood, Spleen and lymph/ Heart and vessels/ Glands/ Liver) • Stool microscopy (Ova, Cyst, Pus cells)	30

	• Urine microscopy (Epithelial cells, RBCs, Leukocytes, Casts, Crystals) • Microbiology (Bacterial identification – Shape, Gram+ve/ Gram –ve) • Parasitology (Slide/ Specimen) **Diagnostic report (Assessment format):** Interpret the report and mention the provisional diagnosis (Any of the below): • Hemogram • Liver Function Test (LFT) • Renal Function Test (RFT) • Diabetic profile • Thyroid profile • Lipid profile **Causative factors/ Hetu (Assessment format):** Mention the disease or diseases that are associated with the cause or hetu (Shown as an object/ model/ specimen/ picture) with brief justification (Any of the below): • Any specific diet • Any specific regimen • Any specific factor mentioned for causing a disease	
2	**Long Case: History taking, Examination, Investigation (Order and interpretation), Differential Diagnosis, Provisional Diagnosis (1 Case X 40 Marks = 40 Marks)** **a. History taking (Including communication skills) - 10 Marks** History taking should cover the following points: • AturaVivara (Basic patient details) • Pradhana Vedana with Kala prakarsha (Chief complaints with duration) • Vartamana vyadhi vruttant (History of present illness) • Poorva vyadhi Vrittanta (Past illness) • Kula vruttanta (Family history) • Chikitsa Vruttanta (Treatment history) • Vayaktika Vruttanta (Personal history) – Ahara, Vihara, Vyasana, Vyayama shakti, Mala pravritti, Mutra pravritti, Raja pravritti, Koshtha, Nature of work and duration of work, Emotional makeup, and Social Relation. **b. Examination & Order and interpretation of investigations – 20 Marks** The examination should include the following points: • General examination including Ashtasthana pareeksha • Systemic examination - Pratyaksha and Anumana Pariksha/ Panchajnanendriyataha Pareeksha (Affected system/ systems), Sroto pareeksha and Mana pareeksha	40

	Investigations should include the following points: • Ordered investigation to patient • Any further comment on the previously ordered investigations and any further suggestions • Interpretation of ordered investigation to the relevant case **c. Differential Diagnosis, Provisional Diagnosis, and Final diagnosis. – 10 Marks** Differential diagnosis and diagnosis (Vyavachedaka nidana and vyadhi vinischaya) should include the following: • Group of suspicious diseases based on your knowledge on Ayurveda and contemporary science against your observation on patient • Justification for inclusion and exclusion of diseases based on pratyatma lakshana • Arriving at a final diagnosis based on the clinical acumen • Drafting the samprapti ghataka (Involvement of dosha, dushya, indriya, manas, agni, koshta, srotas, srotodushti prakara, udbhava sthana, sanchara sthana vyakta sthana, rogamarga, upadrava, arishta, sadhyasadhyata)	
3	**Demonstration: Clinical examination on the simulator or a patient or Simulated patient (SP) (1 Demonstratio**n **X 30 Marks = 30 Marks**): The student will be given a specific case or a scenario (other than the case given for long case taking) and asked to perform the examination of a particular system as a whole or a part of the examination such as inspection or palpation or percussion or auscultation or any specific tests or group of tests or elicit any particular sign for any of the following system (Only steps of examination to be written with observation and interpretation after demonstration): • Respiratory system examination • Cardiovascular System examination • Oral cavity and per abdominal examination • Nervous system examination • Locomotor system examination • Integumentary system examination	30
4	**Viva mark distribution and basic instructions** **Conceptual and theoretical questions:** **MK:**	70

Pareeksha, Dosha Vikr iti, Dhatu and Sroto vaigunya, Ama, Nidana Panchaka, Kriyakala, Vyadhi, Vyadhikshamatwa, Dhatu Paka etc. Annavaha, Pureeshavaha, Pranavaha, Mutravaha, Rasavaha, Raktavaha, Medovaha, Vatavyadhi, Snayugata, Sandhigata vikara etc. **(20 Marks)**

DK:

Rogi and Roga Bala pareeksha, Doshagata and Rogamarga, Nidanarthakara roga, Vyadhi namakarana, Sadyasadyata, Upadrava etc. Common GIT diseases, Common Urinary diseases, Common lung disorders, Fever, Hematopoietic diseases, Cardiovascular disorders, Hepato-biliary disorders, Skin diseases, Thyroid disorders, Obesity, Metabolic diseases, Common neurologic and spine disorders, Diseases of bone, joints, and muscles, Immunological & Metabolic disorders, Common parasitic disorders, Tuberculosis etc. **(10 Marks)**

Link to existing literature and critical thinking:

MK:

Pareeksha, Dosha Vikr iti, Dhatu and Sroto vaigunya, Ama, Nidana Panchaka, Kriyakala, Vyadhi, Vyadhikshamatwa, Dhatu Paka etc.Annavaha, Pureeshavaha, Pranavaha, Mutravaha, Rasavaha, Raktavaha, Medovaha, Vatavyadhi, Snayugata, Sandhigata vikara etc. **(20 Marks)**

DK:

Rogi and Roga Bala pareeksha, Doshagata and Rogamarga, Nidanarthakara roga, Vyadhi namakarana, Sadyasadyata, Upadrava etc. **(10 Marks)**

Viva on activity book:

Questions to be asked as per the heads provided in the activity book (10 Marks)

Basic instructions:

Number of questions: There must be a total minimum of 10 questions and a maximum of 15 questions from both examiners.

1. The questions asked during a viva should be relevant, thought-provoking, and designed to assess the candidate's understanding, knowledge, and critical thinking skills.

2. Breadth and depth: The questions should cover a wide range of topics related to both the papers as well as activity and practical with equal importance, ensuring that they have a comprehensive understanding, critical thinking, and analysis.

3. Open-ended: Questions should be open-ended rather than requiring simple yes/no answers. This allows the candidate to demonstrate their understanding and ability to provide detailed explanations and justifications.

	4. Conceptual and theoretical: Some questions should focus on the candidate's understanding of key concepts, theories, and methodologies within their syllabus. This helps evaluate their grasp of foundational knowledge and their ability to apply it. 5. Critical thinking: The questions should encourage the candidate to think critically, analyze the subject, and findings, and identify limitations or alternative perspectives. 6. Link to existing literature: Some questions can explore the candidate's knowledge and understanding of relevant literature in contemporary science. 7. Follow-up questions: It can be effective to ask follow-up questions to probe deeper into the candidate's responses. This helps assess their ability to defend, respond to challenges, and think on their feet. 8. Avoid leading questions: It is important to avoid leading questions that provide the candidate with clues or guide them towards a specific answer. The goal is to assess their independent thinking and understanding. 9. Balance: The questions should strike a balance between being challenging and fair. It should push the candidate's limits without being excessively difficult or intimidating. 10. No questions will be asked from Nice to know category. However, 70% of the questions are to be asked from Must Know category and 30% from the Desirable to Know category by the examiner.	
5	Internal assessments	30
Total Marks		**200**

References Books/ Resources

S.No	Book	Resources
1	1. Madhava Nidana	Srikanta Murthy KR. Madhava Nidanam (Rogaviniscaya) of Madhavakara. Varanasi: Chaukhambha Orientalia; 2013
2	2. Charaka Samhita	Agnivesh, Charaka, Dridhbala . Reprint. Varanasi: Chowkhamba Sanskrit Series Office; 2009. Charaka Samhita
3	3. Susruta Samhita	Acharya YT, editor. Sushruta Samhita of Sushruta. Reprint ed. Varanasi: Chaukhambha Orientalia; 2017
4	4. Ashtanga Hrudaya	Sadashiva HS, editor. 1st ed. Varanasi: Chaukhambha Sanskrit Sansthan; 2011. Astanga Hrudaya of Vagbhata
5	5. Ashtanga Sangraha	Vagbhata. Ashtanga Sangraha. Edited by Shivprasad Sharma. Chowkhambha Sanskrit series office, Varanasi
6	6. Roga vigyan evum vikruti vigyan	Yashwant Govind Joshi
7	7. Roganidan evum vikruti vigyan	Prof. Ajay Kumar Sharma; Chaukhambha Bharati Academy
8	8. Textbook of Ayurvediya vikrti-vijnana & Roga Vijnana	Dr. Parameswarappa S. Byadgi; Chaukhambha publications, New Delhi
9	9. Textbook of Pathology with Pathology Quick Review and MCQs	2018; Jaypee Brothers Medical Publishers; Harsh Mohan
10	10. A guide to pathology	Jaypee Brothers Medical Publishers; Eigth edition (2005); K Chaudhary
11	11. Robbins & Cotran Pathologic Basis of Disease	10th Edition - May 11, 2020; Kumar, Abbas, Aster; Elsevier publishers
12	12. Davidson's Principles and Practice of Medicine	24th Edition 2022 by Ian Penman (Editor), Stuart H. Ralston (Editor), Mark Strachan (Editor), Richard Hobson (Editor); Elsevier publishers
13	13. A textbook of pathology	N.C Dey & T. K Dey; NCBA publisher 2009
14	14. Boyds Textbook of Pathology	10th Edition by J R Bhardwaj, Prabal Deb (Author), Wolters Kluwer India (Publisher)
15	15. Kundu’s Bedside Clinics in Medicine	2020; KSP Udyog Publisher; Arup Kumar Kundu
16	16. P. J. Mehta's Practical Medicine	21st Edition – 2021; The National Book Depot; Nihar P Mehta, SP Mehta, SR Joshi
17	17. Macleod's Clinical Examination	13th Edition, 2013 by J. Alastair Innes, Anna R. Dover, Karen Fairhurst
18	18. Clinical Methods in Medicine : Clinical Skills and Practices	2015; Jaypee Brothers Medical Publishers; S. N. Chugh, Eshan Gupta

19	19. Chamberlain's Symptoms and Signs in Clinical Medicine	2010; CRC Press; Andrew R. Houghton & David Gray
20	20. Hutchison's Clinical Methods: An Integrated Approach to Clinical Practice	2012; Elsevier publishers Michael Glynn, William M. Drake
21	21. Bates' Guide to Physical Examination and History Taking	Lippincott Williams & Wilkins; 2016 by M.D. Bickley, Lynn S. (Author), M.D. Szilagyi, Peter G. (Author), M.D. Hoffman, Richard M. (Editor)
22	22. French's Index of Differential Diagnosis An A-Z 1	2016; CRC Press; by Mark T. Kinirons (Editor)
23	23. Savills System Of Clinical Medicine	14th Edition 2005; CBS Publishers; by E C Warner (Author)
24	24. Todd-Sanford-Davidsohn clinical diagnosis and management by laboratory methods	2016; Saunders publishers; by Campbell James Todd (Author)
25	25. Clinical Methods In Ayurveda	2013; Chaukhamba Orientalia; by Prof. K.R. Srikantha Murthy (Author)
26	26. Clinical Diagnosis in Ayurveda (A Practical book of Ayurvedic Diagnosis in the Light of Modern Medical Science)	2015; Chaukhamba Sanskrit Pratishthan; by M. Srinivasulu (Author)
27	27. Medical Laboratory Technology	2009; Jaypee Brothers Medical Publishers; by Ramnik Sood (Author)
28	28. Textbook of Medical Laboratory Technology	Revised Reprint 2021; B. Godkar,Darshan P. Godkar; Bhalani publishing house
29	29. Practical biochemistry for medical, dental and allied courses	3rd Edition; by Bd Toora G Rajagopal (Author)
30	30. Essential of clinical pathology	2010; First edition; Jaypee Brothers Medical Publishers; by Shirish M Kawthalkar (Author)
31	31. Textbook of human parasitology protozoology and helminthology	2020; CBS Publishers by Sood R. (Author)
32	32. Clinical Pathology & Clinical Bacteriology (For Medical Students and Practitioners)	Jaypee Brothers Medical Publishers; 9th Edition; 2000 by Sachdev (Author)
33	33. Practical Pathology	Arya Publications; by K. Uma Chaturvedi (Author), Tejindar Singh (Author)
34	34. Text book on clinical biochemistry and hematology	Naveen Chandra, Anmol Publisher ; First edition, 2015

35	35. Medical Laboratory Technology	Third Edition, 2019; NCBA publishers by C R Maiti
36	36. Diagnosis and Treatment of Common Skin Diseases	2016; Jaypee Brothers Medical Publishers; by Virendra N Sehgal (Author)
37	37. Ananthanarayan and Paniker's Textbook of Microbiology	Eleventh Edition; 2020; Universities Press (India) Pvt. Ltd; by R Ananthanarayan and CK Jayaram Paniker (Author), Reba Kanungo (Editor)
38	38. Learning Radiology: Recognizing the Basics	2015; Saunders publishers; by William Herring MD FACR (Author)
39	39. Radiology in Medical Practice	2015; Elsevier India; by A B M Abdullah (Author
40	40. Clark's Positioning in Radiography	13th Edition; 2015; CRC Press; by A. Stewart Whitley (Author), Gail Jefferson (Author), Ken Holmes (Author), Charles Sloane (Author), Craig Anderson (Author), Graham Hoadley (Author)
41	41. Textbook Of Radiology For Residents And Technicians	2018; CBS Publishers; by Bhargava S. K (Author)
42	42. Essentials Of ECG	2017; Avichal Publishing Company; by Vipin Gupta (Author)
43	43. Nidana chikitsa hastamalaka	2016; Baidyanath Ayurved publication; by Vaidya Ranjit Rai Desai
44	44. Rasavaisheshikam	Kottakal Ayurveda Series:120; 3rd Edition; 2014; by K. Raghavan Tirumulpad
45	45. Taber's Cyclopedic Medical Dictionary	23rd Edition; 2017; F.A. Davis Company; by Venes (Author)
46	46. Doshakaranatwa Mimamsa	Chowkhamba Bharati Academy ; 2013; by Acharya P.V. Sharma
47	47. Nadi Darshan	Motilal Banarsidass publishers; by Vaidya Tara Shankar Mishra
48	48. Ayurvediya shabdakosha	Laxmanshastri Joshi, Maharashtra Rajya Sahitya Mandal; 1968; by Veni Madhava Shastri
49	49. Kayachikitsa	Indrayani Sahithya Prakashan; 2015; by Vd Yashwant Govind Joshi
50	50. Dermatological Diseases A Practical Approach	3rd Edition – 2023; TreeLife Media (A division of Kothari Medical); by - (Author), Venkataram Mysore, K H Satyanarayana Rao, Sacchidanand S, M Deepthi, (Editor)
51	51. Introduction to Kayachikitsa	Chaukhamba Orientalia Varanasi; 3rd Edition; 1996; C. Dwarakanath

52	52. Digestion and metabolism in Ayurveda	Chowkhambha Krishnadas Academy; 1997; 2nd Edition; by C. Dwarakanath
53	53. Ayurvedic Nadi Pariksha Vijnana	Chaukhamba Surbharati Prakashan; 2015; by Dr. Govind Prasad Upadhyay
54	54. NAMASTE portal	http://namstp.ayush.gov.in/#/index
55	55. AYUR PRAKRITI WEB PORTAL	http://www.ccras.res.in/ccras_pas/
56	56. AYUSH research portal	https://ayushportal.nic.in/
57	57. Dharaonline	http://www.dharaonline.org/Forms/Home.aspx
58	58. Stanford Medicine25	https://stanfordmedicine25.stanford.edu/
59	59. Medscape Clinical Reference	www.medscape.com
60	60. UpToDate	www.uptodate.com
61	61. Merck Manual Professional Edition	www.merckmanuals.com/professional
62	62. DynaMed	www.dynamed.com
63	63. ClinicalKey	www.clinicalkey.com
64	64. Taber's Medical Dictionary	www.tabers.com/tabersonline
65	65. MedlinePlus Medical Dictionary	https://medlineplus.gov/
66	66. WebMD Symptom Checker	https://symptoms.webmd.com/.
67	67. Mayo Clinic Symptom Checker	https://www.mayoclinic.org/symptom-checker/select-symptom/itt-20009075.
68	68. Simulated cases EM SIM CASES	https://emsimcases.com/
69	69. Daily rounds	https://dailyrounds.org/
70	70. Prognosis	https://play.google.com/store/apps/details?id=com.medicaljoyworks.prognosis&hl=en&gl=US&pli=1
71	71. PubMed Central	https://www.ncbi.nlm.nih.gov/pmc/
72	72. Radiopaedia	https://radiopaedia.org/

Abbreviations

Assessment

S.No	Short form	Discription
1	T-EMI	Theory extended matching item
2	T- EW	Theory Essay writing
3	T- MEQs	Theory MEQs
4	T-CRQs	Theory CRQs
5	T-CS	Theory case study
6	T-OBT	Theory open book test
7	P-VIVA	Practical Viva
8	P-REC	Practical Recitation
9	P-EXAM	Practical exam
10	PRN	Presentation
11	P-PRF	Practical Performance
12	P-SUR	Practical Survey
13	P-EN	Practical enact
14	P-RP	Practical Role play
15	P-MOD	Practical Model
16	P-POS	Practical Poster
17	P-CASE	Practical Case taking
18	P-ID	Practical identification
19	P-PS	Practical Problem solving
20	QZ	Quiz
21	PUZ	Puzzles
22	CL-PR	Class Presentation,
23	DEB	Debate
24	WP	Word puzzle
25	O-QZ	Online quiz

26	O-GAME	Online game-based assessment
27	M-MOD	Making of Model
28	M-CHT	Making of Charts
29	M-POS	Making of Posters
30	C-INT	Conducting interview
31	INT	Interactions
32	CR-RED	Critical reading papers
33	CR-W	Creativity Writing
34	C-VC	Clinical video cases,
35	SP	Simulated patients
36	PM	Patient management problems
37	CHK	Checklists
38	OSCE	OSCE
39	OSPE	OSPE,
40	Mini-CEX	Mini-CEX
41	DOPS	DOPS
42	CWS	CWS
43	RS	Rating scales
44	RK	Record keeping
45	COM	Compilations
46	Portfolios	Portfolios
47	Log book	Log book
48	TR	Trainers report
49	SA	Self-assessment
50	PA	Peer assessment
51	360D	360-degree evaluation
52	TT-Theory	Theory
53	PP-Practical	Practical
54	VV-Viva	Viva

Domain

S.No	Short form	Discription
1	CK	Cognitive/Knowledge
2	CC	Cognitive/Comprehension
3	CAP	Cognitive/Application
4	CAN	Cognitive/Analysis
5	CS	Cognitive/Synthesis
6	CE	Cognitive/Evaluation
7	PSY-SET	Psychomotor/Set
8	PSY-GUD	Psychomotor/Guided response
9	PSY-MEC	Psychomotor/Mechanism
10	PSY-ADT	Psychomotor Adaptation
11	PSY-ORG	Psychomotor/Origination
12	AFT-REC	Affective/ Receiving
13	AFT-RES	Affective/Responding
14	AFT-VAL	Affective/Valuing
15	AFT-SET	Affective/Organization
16	AFT-CHR	Affective/ characterization

T L method

S.No	Short form	Discription
1	L	Lecture
2	L&PPT	Lecture with Power point presentation
3	L&GD	Lecture & Group Discussion
4	L_VC	Lecture with Video clips
5	DIS	Discussions
6	BS	Brainstorming
7	IBL	Inquiry-Based Learning
8	PBL	PBL
9	CBL	CBL
10	PrBL	Project-Based Learning
11	TBL	TBL
12	TPW	Team project work
13	FC	Flipped classroom
14	BL	Blended Learning
15	EDU	Edutainment
16	ML	Mobile learning
17	ECE	ECE
18	SIM	Simulation
19	RP	Role plays
20	SDL	Self-directed learning
21	PSM	Problem solving method
22	KL	Kinesthetic Learning
23	W	Workshops
24	GBL	Game-Based Learning
25	D-M	Demo on Model

26	LS	Library Session
27	PL	Peer learning
28	RLE	Real life experience
29	REC	Recitation
30	SY	Symposium
31	TUT	Tutorial
32	PER	Presentations
33	PT	Practical
34	XRay	X ray identification
35	CD	Case diagnosis
36	LRI	Lab report interpretation
37	DA	Drug analysis
38	D	Demonstration
39	D_BED	Demonstration bedside
40	D_L	Demonstration Lab
41	DG	Demonstration Garden
42	FV	Field visit
43	PRA	Practical

CLINICAL ACTIVITY BOOK

NAME OF THE INSTITUTE WITH LOGO

ROGA NIDAN EVAM VIKRITI VIGYAN
(AYURVEDA DIAGNOSTICS AND PATHOLOGY)

Name of the student:……

Registration number:……..

Academic year:……

University:……

NAME OF THE INSTITUTE WITH LOGO

ROGA NIDAN EVAM VIKRITI VIGYAN
(AYURVEDA DIAGNOSTICS AND PATHOLOGY)
(Subject code: AyUG-RN)

University course code:

DEPARTMENT OF ROGA NIDAN EVAM VIKRITI VIGYAN

(Name of the College)

(Approved by –National Commission for Indian System of Medicines, New Delhi &

Name of the University)

Name of the department

Batch- _____

Certificate

This is to certify that, Mr. / Ms. _____, Enrollment Number- _____ has satisfactorily completed the course of Practicals in (Subject Name) prescribed by the (Name of University) as a part of the Second Professional B.A.M.S. Course.

Examination Seat No.: _____

Date of Examination- _____

Sign. Of Internal Examiner-_____

Sign. Of External Examiner-_____

Sign. of Teacher

Sign. of H.O.D.

CLINICAL ACTIVITY CONTENTS

Sl.No	Name of the clinical activity	PageNo.	Date	Instructor Signature	Remarks
1 to 4 ART OF HISTORY TAKING					
C 1.1 to 1.2	Chief complaint & history of present illness				
C 2.1	Past illness & treatment history				
C 3.1	Family history with pedigree chart, Social history, Environmental history, Seasonal history & Occupational history				
C 4.1	Personal history				
5 GENERAL PHYSICAL EXAMINATION					
C 5.1 to 5.2	A comprehensive general physical examination				
6 COMPREHENDING SYSTEMIC INTRICACIES					
C 6.1 & 6.3	Respiratory system examination				
C 6.2 & 6.4	Cardiovascular system examination				
C 6.5 & 6.7	Oral & Abdominal examination				
C 6.6 & 6.8	Nervous system examination				
C 6.9 & 6.11	Musculoskeletal system examination				
C 6.10 & 6.12	Integumentary system examination				

CLINICAL ACTIVITY CONTENTS					
Sl.No	**Name of the clinical activity**	**PageNo.**	**Date**	**Instructor Signature**	**Remarks**
7 DECODING INSIGHTS					
C 7.1	**Anaemia evaluation**				
C 7.2	**Urinary Tract Infection evaluation**				
C 7.3	**Hepatic evaluation**				
C 7.4	**Renal evaluation**				
C 7.5	**Thyroid evaluation**				
C 7.6	**Diabetes Mellitus evaluation**				
C 7.7	**Stroke evaluation**				
C 7.8	**Arthritis evaluation**				
C 7.9	**Fever evaluation**				
C 7.10	**Male infertility evaluation**				
C 7.11	**Helminthiasis evaluation**				
8 RADIOGRAPHIC INSIGHTS					
C 8.1	**X-Ray reading (Basics – Positioning, etc.)**				
C 8.2	**X-Ray reading and interpretation (Chest)**				
C 8.3	**X-Ray reading and interpretation (Bones and Joints)**				
9 ELECTRO CARDIO GRAPH					
C 9.1 & 9.2	**Basic ECG interpretation**				
10 CASE TAKING					
C 10.1 to 10.5	**Case taking (History to diagnosis & prognosis)**				

Teacher’s signature

ROGA NIDAN EVAM VIKRITI VIGYAN ACTIVITY BOOK

SERIAL NO: 1 **CLINICAL NO: C 1.1 & 1.2**

1. Activity Name

Chief complaint & history of present illness

2. Activity Description:

Interact with patient and record their chief complaints and history of present illness. Write the narrative based on the instructions provided and conclude with your inference.

3. Materials and Equipment:

Case format, Stethoscope, Sphygmomanometer, Thermometer, Pen torch, Reflex hammer, Tuning fork, Measuring tape, Disposable tongue depressors, Cotton swabs, Disposable tissues or wipes, Rulers or Scales, Pins and Hand sanitizer.

4. Patient information:

Age:

Sex: M/ F/Others

Marital status:

Education:

Occupation:

Religion:

Socio-economic status:

Date of Consultation:

Out Patient Number:

Date of Admission:

In Patient Number:

Bed number:

Place of residence:

5. Pradhana Vedana with Kala prakarsha (Chief complaints with duration:) (List complaints succinctly using bullet points, avoid medical terminology, and if there are multiple symptoms, present them in chronological order.)

6. Vedana sammuchraya (History of present illness :) (Write the history of present illness along with duration in chronological order with components such as Onset, Location, Duration, Characteristic or nature, Relieving factors, Aggravating factors, Radiation, Timing or frequency, and severity in paragraph)

Write your inference on below mentioned points (As applicable to chief complaints and history of present illness):

Sl. No	Parameters to be assessed	Item observed in patient	Rationality
1	Dosha and dhatu vridhhi and kshaya		
2	Sama/ Nirama Dosha avastha		
3	Srotas involved		
4	System/ systems involved		
5	Any other		

Teacher's signature

ROGA NIDAN EVAM VIKRITI VIGYAN ACTIVITY BOOK

SERIAL NO: 2 **CLINICAL NO: C 2.1**

1. Activity Name

Past illness & treatment history

2. Activity Description:

Enquire and record about past illness and treatment history. Write your inference in the space provided.

3. Materials and Equipment:

Case format, Stethoscope, Sphygmomanometer, Thermometer, Pen torch, Reflex hammer, Tuning fork, Measuring tape, Disposable tongue depressors, Cotton swabs, Disposable tissues or wipes, Rulers or Scales, Pins and Hand sanitizer.

4. Patient information:

Age:

Sex: M/ F/Others

Marital status:

Education:

Occupation:

Religion:

Socio-economic status:

Date of Consultation:

Out Patient Number:

Date of Admission:

In Patient Number:

Bed number:

Place of residence:

5. Poorvavyadhi Vruttanta (History of Past illness) *(The signs and symptoms of respective system pathology can be enquired – Cardiovascular, Respiratory, Gastrointestinal, Neurological, Musculoskeletal, Endocrine, Immunological, Psychiatry, and Urogenital history in past illness, or any abnormalities such as diabetes mellitus, hypertension, bronchial asthma, Carcinoma, Myocardial infarction, Jaundice, Road Traffic Accident, Hospital admission, Blood transfusion, Surgeries, Childhood, etc including Immunization (e.g., Vaccinations, Booster Shots) can be mentioned in relation to the present complaints).

6. Chikitsa Vruttanta (Treatment history): **(Consider the following points while enquiring treatment history: Current Medications (with Dose/ Route of administration/ Chemical name/ Frequency/ Duration), Previous Medications (with Dose/ Route of administration/ Chemical name/ Frequency/ Duration), Medication Allergies or Intolerances, Date of Surgery, Type of Surgery, Surgeon/Provider Name, Outcome or Complications, Physical Therapy, Occupational Therapy, Speech Therapy, Rehabilitation Programs, Counselling or Psychotherapy, Injections or Infusions, Other Therapeutic Intervention, Dates of Hospitalizations, Reason for Hospitalization, Procedures Performed, Length of Stay, Discharge Summary, Herbal Supplements or Remedies, Acupuncture, Massage Therapy, Chiropractic Care, Ayurvedic Treatments, Other Complementary or Alternative Treatments, Treatment Adherence or Compliance, Treatment Modifications, Reasons for Modifications (e.g., Efficacy, Side Effects), Date of Consultation/Referral, Specialist/Consulting Provider Name, Reason for

Consultation/Referral, Recommendations or Findings from Consultation, Previously Attempted Alternative Treatments, Reasons for Discontinuation or Change of Alternative treatments, Outcome or Response to Previous Alternative Treatment, Patient's Response to Treatment, Treatment Efficacy or Effectiveness, and Side Effects or Adverse Reactions)

Additional space may be utilized below for detailed writeup for each section if required such as for multiple treatments or surgeries.

Clinical condition	****Treatment/ Surgery done or on-going** **(If Not Applicable mention NA)**	**Duration**	**Outcome & Remarks**

Mention Asatmya with reference to Aushadha (Drug allergy) (If any):

Write your inference in relation to the past/ present clinical condition:

Sl. No	**Parameters to be assessed**	**Item observed in past illness**	**Relation to the present illness**
1	Dosha – Anubandhya and Anubandha dosha		
2	Dushya involved		
3	Sroto dushti		
4	System involved		
5	Paraspara anubandha vyadhi		
6	Vyadhi sankara		

Teacher’s signature

ROGA NIDAN EVAM VIKRITI VIGYAN ACTIVITY BOOK

SERIAL NO: 3 **CLINICAL NO: C 3.1**

1. Activity Name

Family history with pedigree chart, social history, environmental history, seasonal history and occupational history

2. Activity Description:

Record and draw a pedigree chart reflecting the family history and write the summary. Write your inference in the space provided.

Interact and record social history, environmental, seasonal and occupational history of patient. Write your inference on possible impact of social history, environmental, seasonal and occupational history in reducing or aggravating or causing the current condition of the patient.

3. Materials and Equipment:

Case format, Stethoscope, Sphygmomanometer, Thermometer, Pen torch, Reflex hammer, Tuning fork, Measuring tape, Disposable tongue depressors, Cotton swabs, Disposable tissues or wipes, Rulers or Scales, Pins and Hand sanitizer.

4. Patient information:

Age:

Sex: M/ F/Others

Marital status:

Education:

Occupation:

Religion:

Socio-economic status:

Date of Consultation:

Out Patient Number:

Date of Admission:

In Patient Number:

Bed number:

Place of residence:

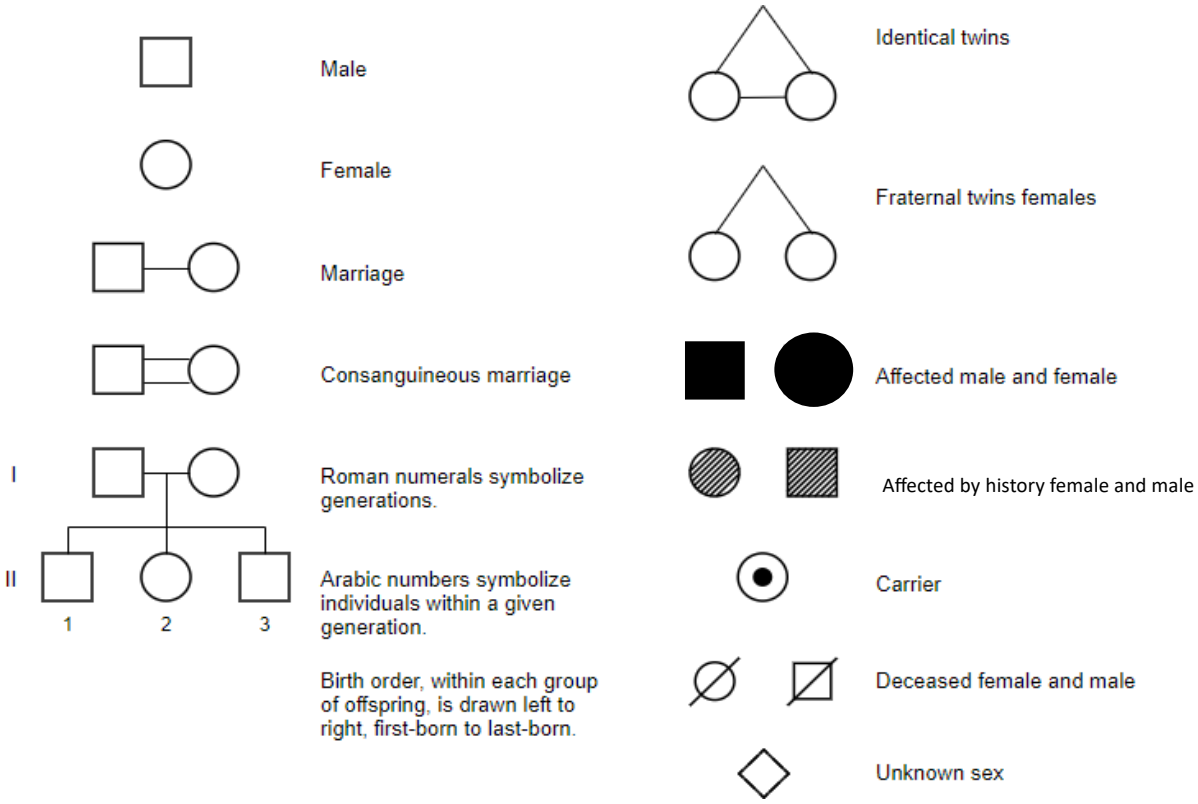
5. Kula vruttanta (Family history) Along with pedigree chart:

*Enquire following details: Genetic or Hereditary Conditions (Runs in family/ Identified genetic mutations or abnormalities), Any family member with similar complaints, Consanguineous marriage history, Ethnicity and Heritage (of patient and family), Environmental Factors (of patient and family), Cause of death of any family members, Confirmation and Source (Family history) and record in the respective section.

Family Member & Relation to patient	**Medical Condition (Relevant to family history – common and rare conditions)**	***Details of the medical condition**	**Write your inference with relevance to current condition of patient if applicable**

Pedigree chart (Draw):

Symbols for drawing Pedigree chart:



[Image Source: Visual Paradigm Online]

Draw the Pedigree chart for the patient:

Write your inference on below mentioned points:

Sl. No	Parameters to be assessed	Observations in family member	Any relation to the current illness
1	Bija dushti (Specify Bija, Bija bhaga, Bija bhaga avayava dushti if possible)	Yes/ No	
2	Adibala (Hereditary)	Yes/ No	
3	Janmabala (Congenital)	Yes/ No	

6. Samajika Vruttanta (Social history):

(Enquire the following details in respective sessions – **1.** Patient's current living arrangements, including whether they live alone, with family, in any health care centres, or in other housing situations **2.** Single, married, divorced, separated, or widowed **3.** Patient's educational background, and any vocational training or higher education degrees **4.** Patient's social support system, including family, friends, and community resources that play a role in their life, any significant relationships and sources of support **5.** Patient's history of substance use, including alcohol, tobacco, and recreational drugs along with the type, frequency, and duration of substance use, as well as any history of substance abuse or addiction **6.** When appropriate and relevant, report on the patient's sexual history, including sexual orientation, sexual activity, and any history of sexually transmitted infections **7.** Patient's cultural and religious affiliations, beliefs, and practices that may be relevant to their healthcare. Consider how these factors may influence their health beliefs and healthcare decision-making **8.** Highlight the patient's hobbies, interests, and recreational activities that contribute to their social engagement and well-being. This may include sports, arts, volunteering, or other leisure activities **9.** Patient's financial status, including their employment income,

insurance coverage, and any financial challenges that may impact their access to healthcare **10.** Significant life events, social stressors, or challenges that the patient is facing, such as recent loss, family conflicts, or housing instability **11.** Any additional social factors that are relevant to the patient's health and well-being, such as immigration status, military service, or involvement in the criminal justice system)

Areas to be enquired (Refer the above paragraph)	**Observations**	**Relevance in terms of shareerika dosha and manasika bhava**
[1]Living Situation		
[2]Marital/Relationship Status		
[3]Education		
[4]Social Support Network		
[5]Substance Use History		
[6]Sexual History		
[7]Cultural and Religious Background		
[8]Hobbies and Recreational Activities		
[9]Financial Status		
[10]Social Stressors and Challenges		
[11]Other Relevant Social Factors		

7. Desha (Environmental history):

Specify jaata and vyadita desha: Jaata - Jangala/ Anupa/ Sadharana;
Vyadita - Jangala/ Anupa/ Sadharana

Areas to be enquired	**Observations**	**Relevance in terms of shareerika dosha and manasika bhava**

Climate and geographical location of Residential area		
Duration of stay in the residential area with location		
Duration of stay (If shifted from previous residence to a new location - mention details)		
Travel history and exposures related to travel		

8. Kala (Seasonal): (Describe below any aggravation of complaints with relevance to the kala or season):

9. Occupational history: *(Enquire regarding current occupation, job duration, work environment, hazards and exposures, protective measures, work schedule, previous occupations, occupational injuries, psychosocial factors, occupational health screenings):

***Occupational history**	***Write Your observation**	**Relevance to shareerika dosha and manasika bhava**
Physical environment		
Psychological environment		

Teacher's signature

ROGA NIDAN EVAM VIKRITI VIGYAN ACTIVITY BOOK

SERIAL NO: 4 **CLINICAL NO: C 4.1**

1. Activity Name

Personal history

2. Activity Description:

Enquire and record about personal history. Write your inference on possible impact of personal history in aggravating or causing the current condition of the patient.

3. Materials and Equipment:

Case format, Stethoscope, Sphygmomanometer, Thermometer, Pen torch, Reflex hammer, Tuning fork, Measuring tape, Disposable tongue depressors, Cotton swabs, Disposable tissues or wipes, Rulers or Scales, Pins and Hand sanitizer.

4. Patient information:

Age:

Sex: M/ F/Others

Marital status:

Education:

Occupation:

Religion:

Socio-economic status:

Date of Consultation:

Out Patient Number:

Date of Admission:

In Patient Number:

Bed number:

Place of residence:

5. Vaiyaktika Vruttanta (Personal history):

Ahara, Agni, Koshta, Mala – Pureesha/ Bowel:

Ahara:

Tick appropriate:

Ahara matra or Abhyavaharana shakti – Poorvakaleena i.e Heena/ Madhyama/ Pravara

Ahara matra or Abhyavaharana shakti – Adyatana i.e Heena/ Madhyama/ Pravara

Most commonly consumed food items	**Identify the predominant Rasa, Guna and classify in terms of satvika, rajasika, tamasa**	**Write your inference regarding influence on Agni, Dosha (Manasika and Shareerika), and Dushya**

Ahara vidhi: Regular/ Irregular; Interval between two consumptions……Hrs; Frequency of meals per day……..

Upavasa: Engaging/ Not engaging. If engaging mention pattern of fasting……..

Mention Asatmya with reference to Aahaara (If any):

Agni (*Enquire the mentioned points to the patient to infer regarding the Agni bheda - Teekshna/ Manda/ Vishama/ Sama agni):

Pattern of Digestion	Tick the type of agni
Even small quantity of regular meal (easily digestible) may take longer time to digest & reduced appetite for the next scheduled meal.	☐ Mandagni
Regular serving of meal consumed on regular intervals gets digested normally and good appetite for next scheduled meal.	☐ Samagni
Regular serving size of regular meal gets digested quickly with frequent hunger pangs & making the person to eat at frequent intervals before next meal scheduled time. Even heavy meals get digested easily before the next scheduled meal time.	☐ Teekshnagni
Irregular phase of digestion & indigestion which may also be associated with regular bowel movement and constipation.	☐ Vishamagni

Mala pravrutti – Pureesha/ Bowel:

Parameters to be enquired	Write your observation	Write your inference
Frequency (Per day)	……..Per day.	

Consistency	Ati grathita (Knotty or hard stool)/ Ati drava (Watery)/ Picchila (Slimy)/ Any other…….	Sama/ Nirama (Also mention predominance of dosha)
Colour & Appearance	Tila pishta nibha (Pale or Clay coloured)/ Peeta (Yellowish)/ Shyava (Blackish)/ Rakta (Reddish)/ Harita (Greenish)/ Any other…..	
Pravahika (With tenesmus)	Yes/ No	
Evacuation	Complete/ Incomplete (Kricchra pureesha, Alpa pureesha, etc.)	
Faecal incontinence	Present/ Absent	
Any other complaints	Sa shoola/ Any other….	

Mutra pravrutti – Micturition:

Urine characteristics	**Write your observation**	**Write your inference on dosha involved**
Frequency at day		
Frequency at night		
Stream	Forceful/ Weak/ Dribbling/ Split/ Spraying/ Narrow	
Colour	Pale yellow/ Dark yellow/ Amber/ Brown/ Pink or red/ Orange	
Burning sensation	Yes/ No	
LUTS*	Yes/ No	
Any other		

*LUTS – Lower Urinary Tract symptoms: Voiding or obstructive symptoms: Hesitancy, Poor and/or intermittent stream, Straining,

Prolonged micturition, Feeling of incomplete bladder emptying, Dribbling, Any other. Storage or irritative symptoms: Frequency, Urgency, Urge incontinence, Nocturia, Any other.

Koshta (Mridu/ Madhyama/ Krura):

Influence of mentioned items on koshta observed and other features in the patient	**Tick the type of koshta**
Has regular bowel movements, typically once or twice daily. Stools are either semi-formed or fully formed, making defecation easy and requiring less time. Experiences satisfaction after bowel movements. Weak laxatives and the consumption of Ikshu, Ksheera, Payasa, Sarpi, Draksha, and Ushna jala can easily lead to loose stools.	☐ Mridu koshta
Has daily bowel movements, passing formed stools with minimal stress and taking a slightly longer time compared to a mridu koshta. Experiences satisfaction after defecation and rarely encounters loose stools or hard stools.	☐ Madhyama koshta
Irregular bowel movements with infrequent stool passage. Stools are hard and dry, necessitating straining and an extended time for defecation. Bowel clearance is unsatisfactory, and hard stool is more prevalent than loose stools. Generally requires laxatives to clear stools.	☐ Krura koshta

Work, Nidra, Vyasana:

Nature of work	Write your observation and inference	Inference for shareerika dosha and manasika dosha
Type of karma (Work)	Shareerika/ Manasika/ Vachika	
*Nature of work (Refer below)		
Timing/ Duration of work		
If shifting duties (Specify pattern)	Morning/ Evening/ Night/ Any other….	
Sedentary	Yes/ No	
Exertional	Yes/ No; If Yes - Physically/ Mentally/ Both	
Performs beyond or less than Ardha shakti (Shareerika)**Refer below	More/ Less	

*(Enquire for Work: Manual Labour – Lifting, Carrying, Pushing, Pulling, Grasping, Manoeuvring heavy objects; Repetitive Movements - Repetitive lifting, Continuous bending, Prolonged standing, Frequent kneeling; Fine Motor Skills - Precision tasks, Small object manipulation, Detailed handwork; Sedentary Work - Desk work, Computer-based tasks, Administrative duties; Outdoor Work - Exposure to weather conditions, Physical activities in varying climates, Fieldwork; Heavy Machinery Operation - Operating equipment, Machinery handling, Vehicle driving; Construction Work - Building structures, Demolition work, Carpentry; Healthcare Professions - Patient care, Medical procedures, Surgical interventions; Agricultural Work - Farming activities, Animal care, Crop harvesting; Service Industry - Waitstaff duties, Customer service roles, Retail tasks;

Athletic or Sports Activities - Training sessions, Competitive sports, Coaching responsibilities; Educational Field - Teaching tasks, Classroom activities, Lab work)

** *Kaksha lalaata nasaasu hasta paadaadati sandhishu prasvedan mukha shosha. Hruda sthaana sthito vaayu yadha vaktram prapadyate.*

Mention Asatmya with reference to Vihaara (If any):

Nidra:

Nidra	**Write your observation and inference**	**Inference for shareerika dosha and manasika dosha**
Status of nidra	Normal (Sufficient sleep and Freshness after getting up or not)/ Excess/ Disturbed*	
*If disturbed -	Difficulty in getting the sleep/ Difficulty in maintaining the sleep/ Early morning awakening	
Duration in hrs per day and night		
Divasavpna	Present/ Absent (If present specify duration)	
Ratri jagarana	Present/ Absent (If present specify duration)	

Vyasana:

Addictions/ Habits	Duration & Quantity	Dependence Yes/ No	Inference for shareerika dosha and manasika dosha
Smoking			
Alcohol			
Tobacco chewing			
Screen time			
Any Others			

Raja pravrutti – Menstrual history:

Menstruation and Menstrual cycle characteristics	Write your observation	Inference for shareerika dosha
Raja pravrutti - Regular/ Irregular		
Days of flow		
Duration of cycle		
Nature of flow - Quantity (E.g. No. of Pads, or menstrual cup, etc.)		
Clots, odour, etc.		
Any other complaints or observation		

Obstetric History (Mention G P L A D with details of delivery and complications, if any):

G - Gravida, P - Parity, L - Living Child, A – Abortion D – Death after live birth*(**Furnish information regarding GPLAD below as subscript** Eg: G = Gravida (Times conceived) P = Para (Number of pregnancies crossed viability) L= Live (Number of live births) A =

Abortion (Number of abortions) D = Death after live birth (Number of deaths after live birth).

G_3 P_1 $L_1A_2D_0$ = G_3 - Patient got pregnant 3 times out of which P_1 - 1 pregnancy crossed Viability age, L_1 - one pregnancy delivered live baby and A_2 - out of 3 pregnancies 2 abortions happened and D_0 - no death after live birth.

***G P L A D** (Write as sub script here. Ex - G_3 P_1 $L_1A_2D_0$)

Delivery (First/ Second/ etc.)	**Mode of delivery** (Normal vaginal/ Forceps/ LSCS)	**Post-partum complication** (Yes/ No; If Yes elaborate)

Write inference based on your observation:

Manasika bhava (Emotional makeup): *(Write the manasika bhava experienced by the patient such as Shoka, Chinta, Bhaya, Dvesha, Krodha, Lobha, Mada, or any other)

***Manasika bhava (Emotion) experienced by the patient**	**Write your inference (Regarding manasika dosha affected)**

Vegadharana: Present/ Absent (If present, specify with duration and frequency)

Any other relevant information to be furnished in personal history:

Teacher's signature

ROGA NIDAN EVAM VIKRITI VIGYAN ACTIVITY BOOK

SERIAL NO: 5 **CLINICAL NO: C 5.1 & 5.2**

1. Activity Name

A comprehensive general physical examination

2. Activity Description:

Perform and record general physical examination of patient, and write your inference in the space provided.

3. Materials and Equipment:

Case format, Stethoscope, Sphygmomanometer, Thermometer, Pen torch, Reflex hammer, Tuning fork, Measuring tape, Disposable tongue depressors, Cotton swabs, Disposable tissues or wipes, Rulers or Scales, Pins and Hand sanitizer.

4. Patient information:

Age:

Sex: M/ F/Others

Marital status:

Education:

Occupation:

Religion:

Socio-economic status:

Date of Consultation:

Out Patient Number:

Date of Admission:

In Patient Number:

Bed number:

Place of residence:

5. General physical examination:

Sangya jnana (Consciousness):

Conduct a subjective evaluation of consciousness, considering reporting in Ayurveda as Moha, Murcha, Mada, Tandra, Mada, Sanyasa, Tama pravesha, Nisangya, as well as subjective descriptors such as Lethargy, Drowsy, Stupor, Obtundation, Coma, etc.

Write the observations on Sangya jnana (Consciousness) – Subjective assessment	**Write your inference**

Vitals:

Pulse examination/ Nadi pareeksha:

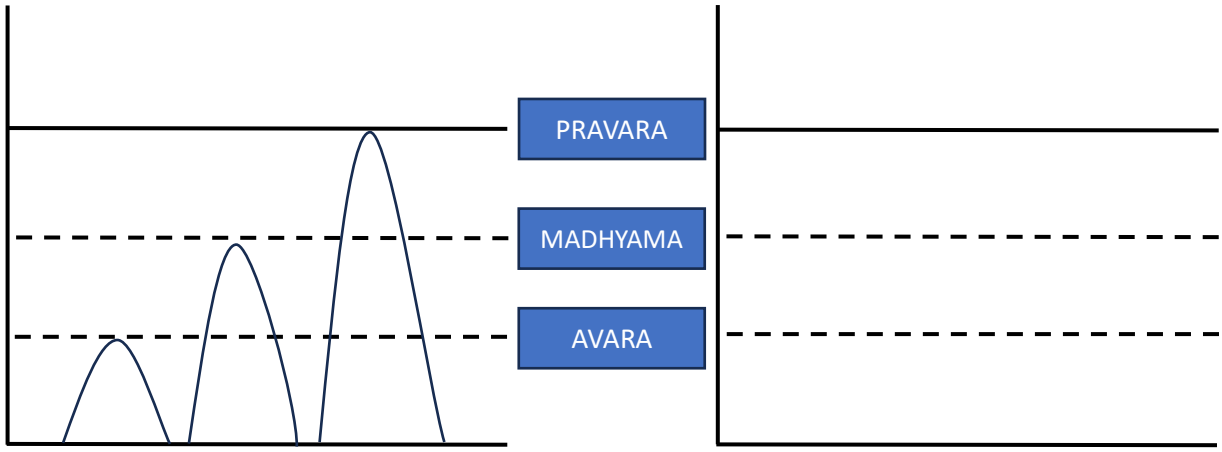
Site:

Parameters to be examined	**Write the observations on Pulse**	**Write your inference (Regarding dosha involved)**
Palpable	Yes/ No	
Rate	……. Per minute (Tachycardia/ Bradycardia)	
Rhythm	Regular/ Irregular (If irregular – Regularly	

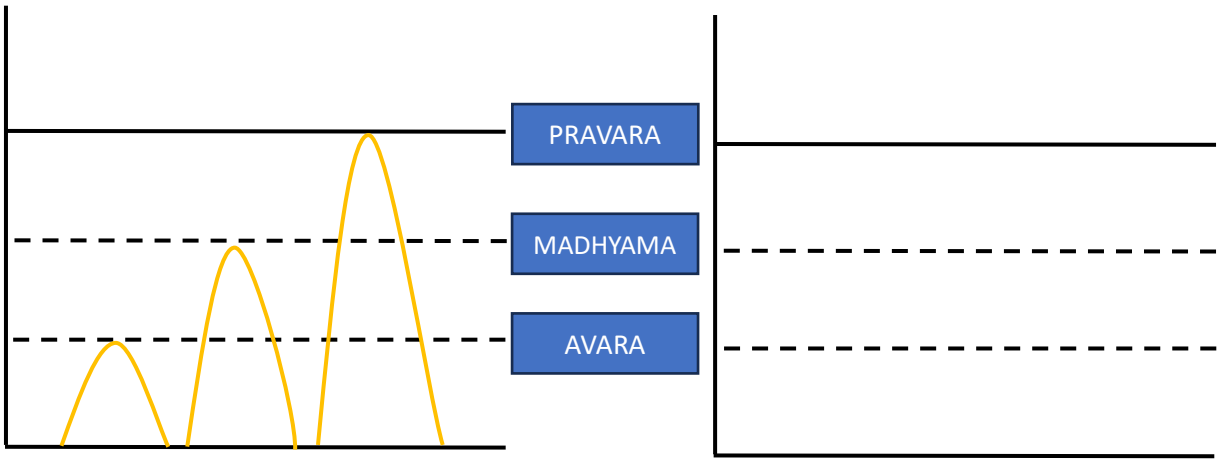
	irregular, Irregularly irregular)	
Character	Water-Hammer Pulse (Corrigan's Pulse)/ Pulsus Parvus et Tardus/ Any other……..	

Illustrate your observations on the blank graph, following the example provided on the left side for pravara, madhyama, or avara. The left-side graphs serve as visual guides (Black line represents Vata, Green represents Pitta, Blue represents Kapha) for creating graphs on the right, considering the amplitude and volume of the felt pulse. Dedicate one graph for each finger—Index, Middle, and Ring finger. The final graph is for collective observations, providing a graphical representation based on dosha-wise analysis:

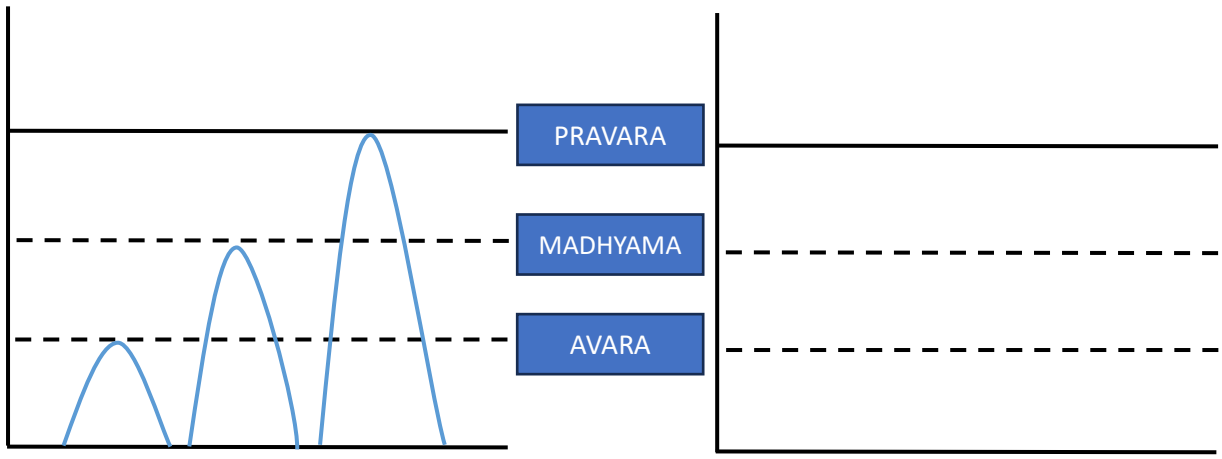
Example **Observation**



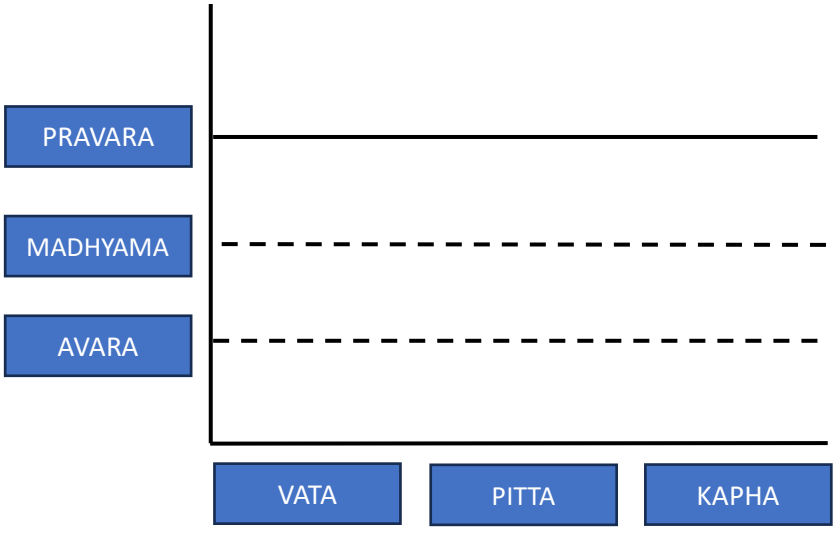
Index finger



Middle finger



Ring finger



Collective observation

Write your inference on predominant dosha associated:

Heart rate: *(Furnish details on rate and rhythm)

Parameters to be assessed	*Write the observations	Inference
Heart rate		
Rhythm		

Blood pressure:

Patient position	Write the observations on Blood pressure (Palpatory and Auscultatory method)	Write your inference (Normotensive/ Hypertensive/ Hypotensive)
Supine		
Sitting		
Standing		

Temperature:

Site of measurement	Time of measurement	Temperature in Celsius or Fahrenheit	Write your inference (Low grade, Moderate grade, High grade)

Respiratory rate:

Write the observations on Respiratory rate (per minute)	Write your inference (Tachypnoea, Bradypnea)

Observe for Pallor, Icterus and Cyanosis. Write your inference below:

Pallor (Pandutvam):

Site	Pallor (Yes/No)	Write your inference
Palpebral conjunctiva		
Lips		
Oral mucosa		
Tongue		
Face		
Skin (Palm/ Sole/ General)		
Nails		

Icterus (Peeta mukha, netra, tvak):

Site	Icterus (Yes/No)	Write your inference
Sclera		
Oral cavity		
Sublingual mucosa		
Skin (Palm/ Sole/ General)		

Nails		

Cyanosis (Central and Peripheral) (Shyava varna):

Site	Cyanosis (Yes/No)	Write your inference
Nose tip (Central)		
Lips (Central)		
Tongue (Central)		
Finger/ Toe tip (Peripheral)		
Nails (Peripheral)		
Peripheral parts of body (Peripheral)		

Nakha pareeksha (Examination of nail & nail bed):

Parameters to be observed	Write your observations and inference (Eg: Rough nails indicate rookshata, Shiny nails indicate snigdhata, etc.)
Nail clubbing (With grade)	
Spooning of nail (Koilonychia)	
Brittleness and crumbling	
Colour of the nail bed	
Capillary refill of nail bed	
Tenderness of nail bed	

Shareera pramana, Akriti, Samhanana, Sara and other features (Height, Weight, Body Mass Index, Built, Nutrient deficiency):

*Use thumb width in centimetres as anguli pramana (Charaka). Measure width of thumb in centimetres using standard measuring tape. Measure height in centimetres using standard measuring tape. Convert the height in anguli pramana by using the following formula:

Height (in cm)/ Width of thumb (in cm) = …….. Anguli pramana of height

Normal height of an individual is 84 anguli. <84 anguli is hrsva. >84 anguli is dheerga.

For example height of an individual is 168 cm and width of thumb is 1.9 cm, so his height is 168/1.9 = 88 Anguli pramana (Dheerga)

Parameter to be assessed	Observation	Inference
Shareera pramana		
*Height (Refer above)		Deergha/ Hrsva/ Prakruta
Weight (Weight in Kilograms		Ati sthoulya/ Atikrisha
Body Mass Index (Refer BMI Chart below)* (BMI) calculation. Ati sthoulya/ Atikrisha	Formula: Weight (kg) / Height $(m)^2$	Ati sthoulya/ Atikrisha
Akriti - Built - Endomorphic, ectomorphic, and mesomorphic		Ati sthoulya/ Atikrisha

Nourishment status		
Muscle bulk (Left mid upper arm circumference in centimetres)		Over nourished/ Well-nourished/ Under nourished
Subcutaneous fat thickness (Triceps skin fold thickness of mid arm in millimetres)		
Macronutrient deficiency (Protein/ Carbohydrate/ Fat)	Absent/ Present (If present specify)	
Micronutrient (Vitamin & Mineral deficiency)	Absent/ Present (If present specify)	

***BMI Chart:**

WHO CLASSIFICATION OF WEIGHT STATUS	
WEIGHT STATUS	**BODY MASS INDEX (BMI), kg/m^2**
Underweight	<18.5
Normal range	18.5 – 24.9
Overweight	25.0 – 29.9
Obese	≥ 30
Obese class I	30.0 – 34.9
Obese class II	35.0 – 39.9
Obese class III	≥ 40

[Image source: Quizlet Flash cards]

Sparsha pareeksha:

Oedema (Shotha):

* Examine regions such as Face, Hands, Legs, Sacral, or any other specified areas, and record distinct observations in separate rows, indicating the side (Right/ Left) for each.

*Site of oedema examined (Refer above)	Observation Darshana – Inspection	Observation Sparshana – Palpation	Write your inference in terms of dosha and dushya
	Visible swelling – Present/ Absent Symmetry – Symmetrical/ Asymmetrical Skin colour – Normal/ Altered (If altered mention)…….	Consistency – Firm/ Soft Temperature – Normal/ Altered (If altered mention) Tenderness – Present/ Absent Pitting/ Non – pitting oedema Circumference ……..	

Features to be observed for shotha in patient	Tick the type of shotha
The migrating pitting oedema, primarily localized in the lower extremities, amplifies throughout the day (diva bali), yet significantly diminishes by night.	☐ Vataja
The non-pitting or slowly pitting oedema, predominantly affecting the upper body, notably the face, escalates during the night (ratri bali), reaching its peak visibility in the early morning	☐ Kaphaja

hours, and gradually diminishes as the day progresses.	
The swiftly advancing localized edema exhibits diverse hues like brown, reddish, coppery red, or black. It presents warmth, tenderness upon touch, and intense burning sensations. Occasionally, systemic indications hint at potential suppuration.	☐ Pittaja

Lymphadenopathy:

*Examine various sites, including the neck, underarms, and groins, for nodes such as submental, submandibular, pre-auricular, post-auricular, occipital, deep and superficial cervical chain, axillary, inguinal. Record positive findings in separate rows, specifying the side (Right/ Left) of involvement if observed.

***Site/ Lymph node examined (Refer above)**	**** Write the observations on Lymph node Examination –** **[1]Darshana – Inspection;**	**** Write the observations on Lymph node Examination – [2]Sparshana – Palpation**	**Write your inference (Include comments on involvement of drainage areas of respective node if involved)**
	Visible swelling – Present/ Absent Symmetry – Symmetrical/ Asymmetrical	Tenderness – Present/ Absent Consistency – Firm/ Soft/ Rubbery/ Hard Size (Measure using finger breadth or measuring tape or callipers) –	

		Mobility – Freely movable/ Fixed	

Shabdha pareeksha – Examining voice and speech of patient:

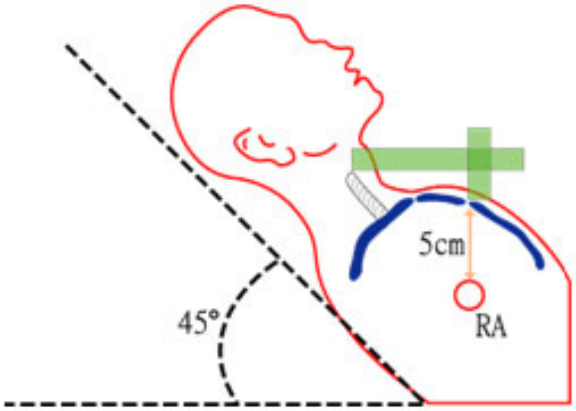
Parameter	Observation	Inference
Voice	Prakruta/ Vaikruta	
Speech	Prakruta/ Vaikruta	
Dosha assessment (Kapha - Guru; Pitta - Sphuta (broken, split); Vata - Khara, Parusha)		

Jihwa pareeksha (Tongue examination):

*(Varna – Pandu, Rakta, Haridra, Harita, Krishna, Neela, Shweta; Pramana – Tanu, Sama, Sandra; Upalepa; Chalana)

Parameters	*Write the observations on Jihwa	Write your inference
Colour		
Contour and size		
Coating		
Appearance		
Dosha assessment (Vata - Khara sparsha, sphutita, Sheeta; Pitta - Raktashyama varna; Kapha - Shweta, Ati picchila)		

Jugular Venous Pressure (JVP): Present/ Absent (If present mention in centimetres)



[Image source: Quizlet Flash cards]

Mention the height of JVP on diagram above sternum

Any other relevant information to be furnished in general physical examination:

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ROGA NIDAN EVAM VIKRITI VIGYAN ACTIVITY BOOK

SERIAL NO: 6 **CLINICAL NO: C 6.1 & 6.3**

1. Activity Name

Respiratory system examination

2. Activity Description:

Perform and record respiratory system examination of patient. Write your observations and interpretation on possible conditions or diseases the patient is suffering from.

3. Materials and Equipment:

Case format, Stethoscope, Sphygmomanometer, Thermometer, Pen torch, Reflex hammer, Tuning fork, Measuring tape, Disposable tongue depressors/ Stainless steel tongue depressor, Cotton swabs, Disposable tissues or wipes, Rulers or Scales, Peak flow meter, Pins and Hand sanitizer.

4. Patient information:

Age:

Sex: M/ F/Others

Marital status:

Education:

Occupation:

Religion:

Socio-economic status:

Date of Consultation:

Out Patient Number:

Date of Admission:

In Patient Number:

Bed number:

Place of residence:

5. Respiratory system examination:

Prashna pareeksha – Short history (Including upashaya anupashaya) – Relevant to the patient:

Darshana pareeksha - Inspection:

*Perform Nasa pareeksha –

Upper respiratory tract – **External appearance** like structure of nose, shape, symmetry, deformities, lesions, swellings or any other changes on skin), **nasal cavity** (mucosal colour, swelling, discharge and any other abnormalities), septum (deviation), turbinate (hypertrophy), nasal polyps, nasal discharge - nasa srava (colour) and record the findings with inference below:

*Site of examination	*Observations	Inference

*Observe Mukha/ Taalu/ Gala pareeksha - Oral cavity and throat (oral cavity, tonsils, uvula and pharynx, post nasal drip) and record the findings with inference below:

*Site of examination	*Observations	Inference

Shape of chest: Normal/ Abnormal (Barrel shaped) ……..

Antero-posterior diameter of Chest:……
Transverse diameter of Chest:……

[1]Perform Ura pareeksha (*Kubjatva – Yaduktam hrudayam yadi va prushtam unnatam kramasha sa ruk – Hrudayam unnatam* – pectus carinatum or pigeon shaped chest and Pectus excavatum or funnel shaped chest; *Prushtam unnatam* – Kyphosis, Lordosis, Scoliosis)

Identify whether these deformities are there Sahaja (since birth) or Jataja (acquired), see for [2]Harrison's sulcus, symmetry of the chest, [3]Trail's sign, and [4]Apex beat:

[1]Mention shape of chest (Refer above)	Sahaja/ Jataja	Inference

[2]Harrison's sulcus (Present/ Absent)	Inference

[3]Trail's sign (Present/ Absent)	Inference

[4]Apex beat (Observed/ Not observed) If observed approximate location	Inference

Symmetry of chest: Symmetrical/ Asymmetrical

Respiratory movements:

*Observe for respiratory movements – different areas of chest (Supraclavicular, Infraclavicular, Mammary, Infra mammary, Axillary, Supra scapular, Inter scapular and Infra scapular areas)

Respiratory movements: Equal/ Diminished ----- Right/ Left

Movement of accessory respiratory muscle:

*Observe for **movement of accessory respiratory muscles** - sternocleidomastoid muscle, scalene muscles, trapezius muscle, and abdominal muscles and record the findings with inference below **(Yes/ No)**

If Yes provide details regarding **Notching of suprasternal and supra clavicular area, Indrawing of intercostal muscles, and Type of breathing (Thoraco-abdominal breathing, and Abdomino-thoracic breathing):

*Name of Accessory respiratory muscle	*Movement Present/ Absent	Inference (**Mention the outcome of laboured breathing)

Nishteevana (Examination of sputum):

Mention features of nishteevana	Observation	Inference
Character - Shushka kapha, Sa kapha (If kapha present - Tanu Kapha, Ghana Kapha, Alpa kapha) **Colour -** Peeta nishteevana, Raktayukta kapha, Harita kapha, Puyopama kapha **Consistency -** Alpatam vrajet (Non – sticky and little), Krcchran muktva (thick tenacious sputum), Snigdha kapha **Odour -** Durgandha yukta kapha (As per patient's statement) **Special observations -** Poorva kaasate sushkam tat shteevate sa shonitam, Shleshma aavruta mukha srota kapha (frothy sputum) **Any other -**		

Write your inference on below mentioned points:

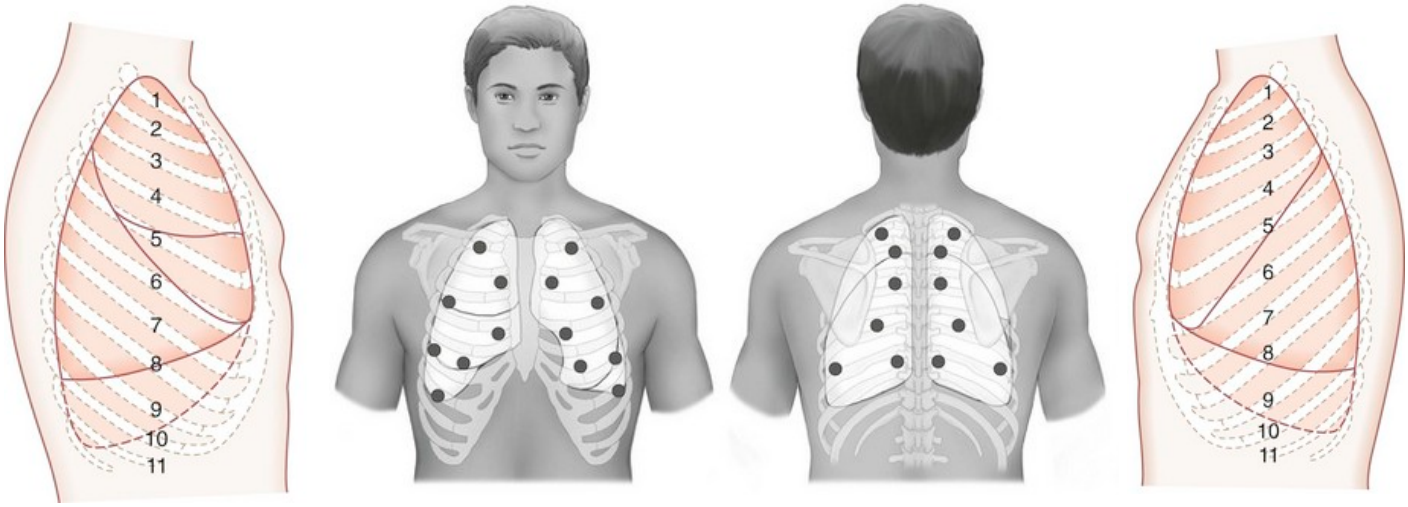
Sl. No	Parameters to be assessed	Item observed in patient	Rationality
1	Dosha – Anubandhya and Anubandha dosha		
2	Sama/ Nirama Dosha avastha		

Sparshana pareeksha of Kantha and Uras - Palpation:

Position of trachea: Central/ Deviated ----- Right/ Left.....
Expansion of the chest -------- cms
Movement of the chest: Equal/ Diminished
Tenderness: Absent/ Present (If present mention the location)
Tactile vocal fremitus: Present/ Absent

Shabdha prakshobha pareeksha - Percussion:

Conduct percussion in the intercostal space at Supraclavicular, Infraclavicular, Mammary, Infra mammary, Axillary, Supra scapular, Inter scapular and Infra scapular areas for various percussion notes such as Resonant, Hyper resonant, Tympanic, Dull, Stony dull note and mark on given diagram below with respective observation and inference.



[Image source: Springer Link – Anatomic, Physiologic, and Therapeutic Principles of Surgical Diseases]

Shrotrendriyataha pareeksha - Auscultation:

Breath sounds (Specify the particular area corresponding to ribs or lobes of the lungs, and indicate the side of examination when documenting observations):

Breath Sounds	Audible / Not Audible	Unilateral/Bilateral (Specify area)	Observation with interpretation
Vesicular			
Bronchial			
Bronchovesicular			

#Click here to listen for bronchial, vesicular and broncho vesicular sounds: https://www.youtube.com/watch?v=JFWMJGtmG5E

Added sounds:

Added Sounds	Audible/ Not Audible	Unilateral/ Bilateral (Specify area)	Inspiratory (Early/ Late)	Expiratory	Both	Observation with interpretation
Crackle/ Crepitation						

#Click here to listen for crackle or crepitation:
https://www.youtube.com/watch?v=AbfsN1YgeSw

Added Sounds	Audible/ Not Audible	Unilateral/ Bilateral	Inspiratory/ Expiratory/ both	Monophonic/ Polyphonic	Fixed/ Random	Observation with interpretation
Wheeze/ Ronchi						

#Click here to listen for wheeze or rhonchi:
https://www.youtube.com/watch?v=aMMlclpBNpg
https://www.youtube.com/watch?v=7cIEXfqnYRQ

Added Sounds	Audible/ Not Audible	Unilateral/ Bilateral	Observation with interpretation

Pleural rub			

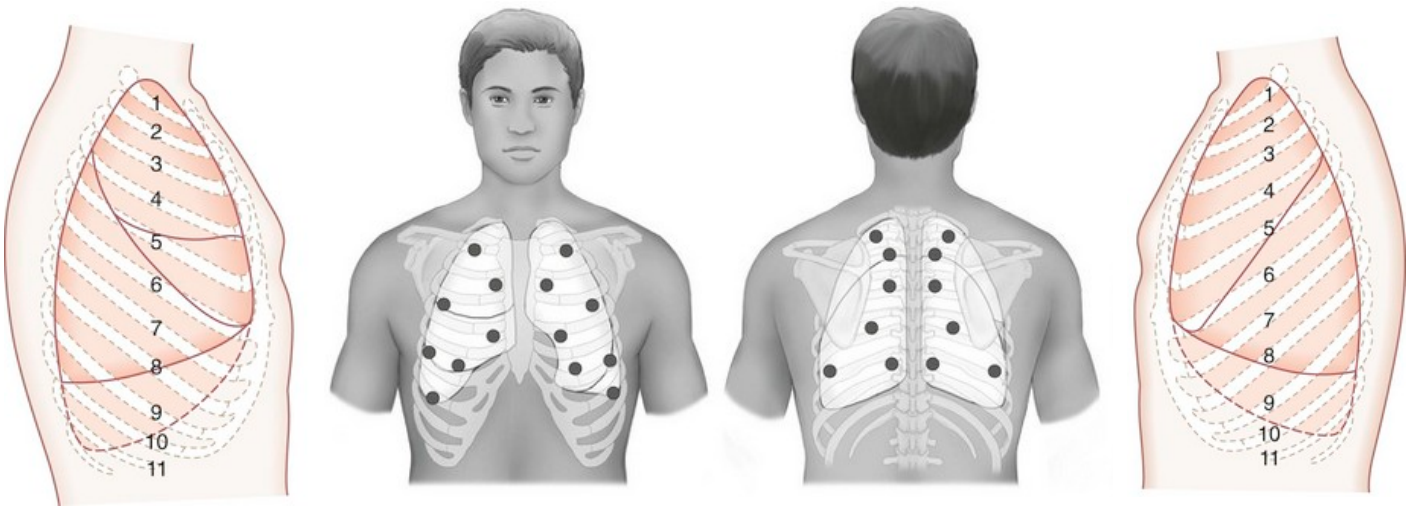
#Click here to listen for pleural rub:
https://www.youtube.com/watch?v=yq0Z3TgGWS4

Voice sounds:

Voice Sounds	Audible/ Not Audible	Unilateral/ Bilateral	Observation with interpretation
Bronchophony			
Aegophony			
Whispering pectoriloquy			

#Link for bronchophony, aegophony, whispering pectoriloquy:
https://www.youtube.com/watch?v=wb15Dex0EFI
https://www.youtube.com/watch?v=E6VC1esEPcY

Provide a summarized overview of the information pertaining to breath sounds in the diagram presented below:



[Image source: Springer Link – Anatomic, Physiologic, and Therapeutic Principles of Surgical Diseases]

Conduct a comprehensive assessment by considering history (including upashaya anupashaya), a thorough physical examination, systemic examination, and relevant investigations. Additionally, perform a differential diagnosis (sapeksha and vyavachedaka nidana) based on the gathered data.

6. Summarize the observations:

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ROGA NIDAN EVAM VIKRITI VIGYAN ACTIVITY BOOK

SERIAL NO: 6 **CLINICAL NO: C 6.2 & 6.4**

1. Activity Name

Cardiovascular system examination

2. Activity Description:

Perform and record cardiovascular system examination of patient. Write your observations and interpretation on possible condition the patient is suffering from.

3. Materials and Equipment:

Case format, Stethoscope, Sphygmomanometer, Thermometer, Pen torch, Measuring tape, Disposable tongue depressors, Cotton swabs, Disposable tissues or wipes, Rulers or Scales, Peak flow meter and Hand sanitizer.

4. Patient information:

Age:

Sex: M/ F/Others

Marital status:

Education:

Occupation:

Religion:

Socio-economic status:

Date of Consultation:

Out Patient Number:

Date of Admission:

In Patient Number:

Bed number:

Place of residence:

5. Cardiovascular system examination:

Prashna pareeksha – Short history (Including upashaya anupashaya) – Relevant to the patient:

Darshana Pareeksha - Inspection:

Features to be observed	Observation	Inference
Precordial bulge		
Location of apex impulse		
Double apical beat		
Neck pulsation		

Sparshanendriyataha pareeksha - Palpation:

Feature to be examined	Observation	Inference
Location of apex beat	Not palpable/ Palpable (If palpable mention the Intercostal space)	
Thrills	Present/ Absent	

Shabdha prakshobha pareeksha - Percussion:

Shrotrendriyataha pareeksha - Auscultation:

Feature to be examined with observation	Inference
Heart Rate & Rhythm	
Intensity of S1	
Intensity of S2	
Character of S1: ..... split..... (Physiological/ Pathological)	
Character of S2: ..... split..... (Physiological/ Pathological – Wide, Wide fixed, Paradoxical)	
S3 and S4: Present/Absent	
Gallop: Present/Absent	

#Click here to listen for heart sound (S1 S2 and Split/ S3 and S4, Gallop): https://www.youtube.com/watch?v=eF-6Cm8amIM
https://www.youtube.com/watch?v=7J72wFtBdU4
https://www.youtube.com/watch?v=o8eqYHCy7dw

Added sounds to be examined with observation (Specify area)	Inference		
Ejection clicks: Present/Absent			
Opening snaps: Present/Absent			
Murmurs (Daraa – Dara darika): *Present/Absent *(If present answer below)	Intensity	Pitch	Manoeuvres
*Systolic murmur - Pan systolic, Long systolic/Early systolic, Mid systolic, Late systolic: Present/ Absent			
*Diastolic murmur - Early diastolic, Mid diastolic, Pre systolic			

Continuous murmur: Present/ Absent	
Carey Coombs murmur: Present/ Absent	
Austin Flint murmur: Present/ Absent	

#Click here to listen for cardiac murmur with details, Carey Coombs murmur and Austin Flint murmur:
https://www.youtube.com/watch?v=IrWEAucHoA0
https://www.youtube.com/watch?v=prcdXzhS5EE
https://www.youtube.com/watch?v=y5CcncRHl38

6. Summarise your observations:

Conduct a comprehensive assessment by considering history (including upashaya anupashaya), a thorough physical examination, systemic examination, and relevant investigations. Additionally, perform a differential diagnosis (sapeksha and vyavachedaka nidana) based on the gathered data.

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ROGA NIDAN EVAM VIKRITI VIGYAN ACTIVITY BOOK

SERIAL NO: 6 **CLINICAL NO: C 6.5 & 6.7**

1. Activity Name

Oral & Abdominal examination

2. Activity Description:

Perform and record oral and abdominal examination of patient. Write your observations and interpretation on possible conditions the patient is suffering from.

3. Materials and Equipment:

Case format, Stethoscope, Sphygmomanometer, Thermometer, Pen torch, Measuring tape, Disposable tongue depressors, Cotton swabs, Disposable tissues or wipes, Rulers or Scales and Hand sanitizer.

4. Patient information:

Age:

Sex: M/ F/Others

Marital status:

Education:

Occupation:

Religion:

Socio-economic status:

Date of Consultation:

Out Patient Number:

Date of Admission:

In Patient Number:

Bed number:

Place of residence:

5. Oral and abdominal examination:

Prashna pareeksha – Short history (Including upashaya anupashaya) – Relevant to the patient:

Oral examination:

Write the observations for

Jihwa pareeksha - Tongue (normal/ colour/ fissure/ glossitis/ coated/ bald/ ulcerated/ geographic) (Tongue – atrophy of papillae, ulcers and white lesions, and enlargement of tongue):

Gum bleeding: Present/ Absent

With your observation and inference:

Per abdominal examination (Specify the area and side wherever applicable):

Darshanendriyataha pareeksha – Inspection:

Write your observation on [1]Udara akriti (Mandala udara/ Adhmaata udara/ Udara utseda); Shape of the abdomen (normal/ scaphoid/ distended/ fullness of the flanks);

[2]Nabhi pareeksha – Umbilicus: Normal/ Everted/ Scarring

[3]Distended veins - Sira santhata (Caput medusa/Collateral veins)
[4]Skin striae - Raji janma or raji santhata

[5]Discoloration of skin – Varna - (Cullen's sign, Turner's sign)

[6]Visible peristalsis: Examine in a step ladder pattern/ left to right/ right to left

[7]Antra vruddhi - Hernia orifices

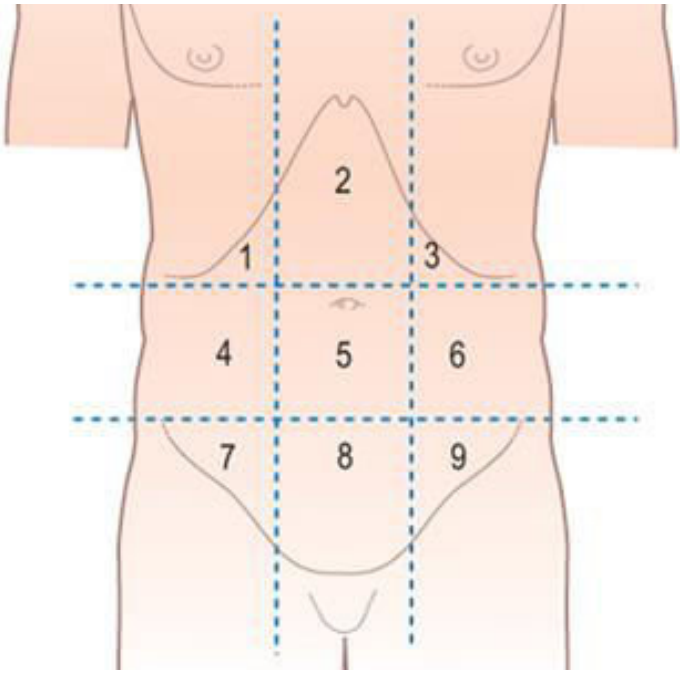
Feature to be inspected for	Observation	Inference
[1]Udara akriti		
[2]Nabhi pareeksha		
[3]Sira santhata	Present/ Absent	
[4]Raji janma	Present/ Absent	
[5]Varna	Normal/ Abnormal	
Movement of the different parts of the abdomen	Present/ Absent	
Visible pulsation	Present/ Absent	
Divarication of rectus abdominis	Present/ Absent	
Scars and sinuses	Present/ Absent	
Visible mass	Present/ Absent	
Sister Mary Joseph nodule	Present/ Absent	
[6]Visible peristalsis	Present/ Absent	
[7]Antra vruddhi	Visible/ Not visible	

Sparshanendriyataha pareeksha - Palpation (superficial palpation, deep palpation, bimanual palpation, ballottement, and dipping method) – Mention the observations in table and mark on the diagram given below:

Palpation	Observation	Inference
Sparsha asahata - Tenderness	Present/ Absent	

Ashaya vruddhi – Organomegaly. (If organomegaly present answer for below)	Present/ Absent	
Yakrut vruddhi - Liver	Size…….. Surface: Regular/ Irregular	
Basti vruddhi - Kidney	Right/ Left	
Pleeha vruddhi - Spleen	Not palpable/ Palpable	
Mootra ashaya vruddhi - Urinary bladder	Not palpable/ Palpable	

Mark and mention the observations regarding palpation on the diagram given below:



[Image source: Elsevier. Swash & Glynn: Hutchison's Clinical Methods 22e]

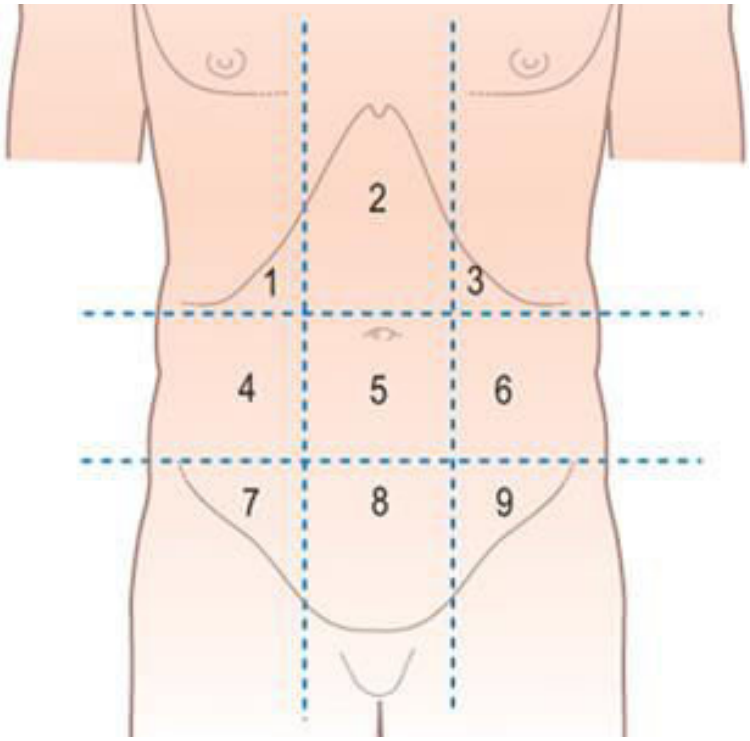
Shabdha prakshobha pareeksha – Percussion:

Mention the observations regarding percussion in table and mark on the diagram given below:

Per Abdominal - Percussion note	Observation Yes/ No (If Yes specify area)	Inference
Hyper resonant		
Resonant		
Dull		
Stony dull		

Special test for ascites - Percussion	Observation	Inference
Puddle sign	Present/ Absent	
Shifting dullness - Udaka poorna druti shabdha	Present/ Absent	
Horseshoe-shaped dullness - Udaka poorna druti shabdha	Present/ Absent	
Fluid thrill - Udaka poorna druti sparsha	Present/ Absent	

Mark and mention the observations regarding percussion on the diagram given below:



[Image source: Elsevier. Swash & Glynn: Hutchison's Clinical Methods 22e]

Shrotrendriyataha pareeksha – Auscultation:

Auscultation	Observation	Inference
Bowel sounds	If Yes, mention number per minute	
Succussion splash over abdomen	Present/ Absent	
Arterial bruits/ venous hums	Present/ Absent	

6. Summarise your observations:

Conduct a comprehensive assessment by considering history (including upashaya anupashaya), a thorough physical examination, systemic examination, and relevant investigations. Additionally, perform a differential diagnosis (sapeksha and vyavachedaka nidana) based on the gathered data.

Teacher's signature

ROGA NIDAN EVAM VIKRITI VIGYAN ACTIVITY BOOK

SERIAL NO: 6 **CLINICAL NO: C 6.6 & 6.8**

1. Activity Name

Nervous system examination

2. Activity Description:

Perform and record nervous system examination of patient. Write your observations and inference on possible conditions the patient is suffering from.

3. Materials and Equipment:

Case format, Pen torch, Reflex hammer, Tuning fork (More than or equal to 128 Hz) Measuring tape, Cotton swabs, Disposable tissues or wipes, Coffee and Tea powder sachet, Pins, Visual acuity and Ishihara colour charts and Hand sanitizer.

4. Patient information:

Age:

Sex: M/ F/Others

Marital status:

Education:

Occupation:

Religion:

Socio-economic status:

Date of Consultation:

Out Patient Number:

Date of Admission:

In Patient Number:

Bed number:

Place of residence:

5. Nervous system examination:

Prashna pareeksha – Short history (Including upashaya anupashaya) – Relevant to the patient:

1. Sangya jnana - Level of consciousness and orientation (Place person time)

Assess the level of consciousness: response to eye opening/ painful stimuli and verbal response. Normal – fully conscious and alert; Stuporous/ drowsy – response to verbal/ painful stimuli; Comatose – no response (Glasgow coma Scale - GCS) and write the inference

Glasgow Coma Scale Scoring	Inference
E - ; V - ; M -	

Assess the orientation (to place / person / time) and write the inference

Orientated to Place Person and Time	Inference
Yes/ No -	

2. Vak indriya - Speech and language

Shabdha pareeksha – Examining voice and speech of patient:

Speech defect	Contemporary understanding	Observation	Inference
Mooka, Vak sangha, Jihvataleshvalasastu	Aphasia	**Yes/ No**	
Minmina	Hyper nasal speech	**Yes/ No**	
Gadgada, Vak stambha, Kala vak	Dysarthria	**Yes/ No**	
Vakya graha	Dysprosody	**Yes/ No**	
Svaraghna	Hoarseness	**Yes/ No**	
Deena svara	Dysphonia	**Yes/ No**	
Deena vak	Scanning speech	**Yes/ No**	
Jihma vak	Apraxia	**Yes/ No**	
Samutkshipta vak	Cluttering speech	**Yes/ No**	

3. Uhya - Perceptions

Assess the Uhya - Perceptions (Sensory awareness of object and its relation) including hallucination and delusions and write the inference

Mention the perceptions	Observation	Inference
Hallucination	Present/ Absent	
Delusions	Present/ Absent	

4. Smriti – Memory

Assess the Remote memory/Recent memory and write your inference

Mention about memory	Observation	Inference
Recent memory	Present/ Absent	
Remote memory	Present/ Absent	

Cranial nerve examination (Sensory & Motor):

Mention side (right and left) wherever applicable

Cranial nerve	Components to be examined	Write your observation on mentioned components and conclude with your inference
Olfactory nerve	Gandha jnana – **Sense of olfaction…….**	
Optic nerve	Netradeenam cha vaikrutim – **Visual acuity……..** **Visual field……** **Colour vision……..** **Fundi……**	
Oculomotor, Trochlear, Abducens	Sthabdha Netra/ Netradeenam cha vaikrutim – **Pupil size…….** **Symmetry…….** **Light reflex…….** **Consensual reflex……** **Accommodation reflex……..** **Ptosis……** **Squint……** **Nystagmus…..** **Conjugate eye ball movement…….** **Diplopia (concomitant/ paralytic)……**	
Trigeminal nerve	Vakrikaroti hanu/ Shankha/ Shravana/ Ganda ruk – **Sensory part:** **Corneal reflex……**	

	Others (Ophthalmic, Maxillary & Mandibular branch observations)…… **Motor part:** **Jaw clenching…….** **Lateral jaw movement……** **Glabellar reflex…….**	
Facial nerve	Vakri karoti nasa bhru lalata/ Mukham jihmam/ Vrujati asye bhojana/ Kshavathu nigraha – **Motor part for Upper face:** **Raising eye brow.....** **Frowning the forehead.....** **Bell's phenomenon.....** **Motor part for Lower face:** **Nasolabial fold.....** **Clenching the teeth.....** **Whistling.....** **Blowing the mouth.....** **Taste sensation (Anterior 2/3rd of tongue): ……**	
Vestibulo cochlear nerve	Badyate shravana – **Cochlear component:** **Rinne's test…….** **Weber's test……** **Hearing tests - impression……..** **Conductive/ sensori neural/ mixed**	

	Vestibular component: Nystagmus/ calorie test:…….	
Glossopharyngeal nerve and vagus nerve	Bhidyate swara/ Mukham jihmam – **Position of uvula…….** **Taste perception (Posterior 1/3rd of tongue)……..** **Gag reflex……..**	
Spinal accessory nerve	Upashoshya bahum – **Sternocleidomastoid muscle…….** **Trapezius muscle……**	
Hypoglossal nerve	Mukham jihmam – **Wasting: Absent/ present……..** **Fasciculations: Absent/ present…….** **Deviation: Right side/ left side** **Movements of tongue: Normal/ abnormal…….** **Power of tongue……**	
Summary		
Affected nerve	**Sensory**	**Motor**

Karmendriya pareeksha/ Chesta - Motor system examination (Specify site examined with side of body wherever applicable):

Mamsa pareeksha/ Mamsa bala/ Supushta mamsa/ Bala heena mamsa – Muscle bulk, Muscle Power and Muscle tone examination.

Evaluate the muscle mass at different locations in centimetres, specifying the type of muscle bulk and providing your analysis. Assess the area 10 cm above the elbow for the arm and below the elbow for the forearm, referencing the olecranon process of upper limb. Measure 18 cm above the patella for the thigh and 10 cm below the tibial tuberosity for the calf. Report your findings accordingly.

Limb	**Muscle bulk (Mention the side and site of measurement along with comparing side)**	**Normal/ Atrophy (Anga shosha)/ Hypertrophy/ Pseudohypertrophy**	**Inference**
Upper limbs (Arm/ Fore arm)			
Lower limbs (Thigh/ Calf)			

Assess the muscle power of various sites with grading and your inference

***Muscle power** grading chart:

0 – no muscle contraction visible
1 – muscle contraction visible, but no movement of joint
2 – joint movement with gravity elimination
3 – movement sufficient to overcome gravity
4 – movement overcomes gravity with added resistance
5 – normal power with full resistance

Limb	Location for examining Muscle power with side	Mention Muscle power grading*	Inference
Upper limbs			
Lower limbs			

Assess the **muscle tone** of various sites with observation and your inference

Limb	Location for examining Muscle tone	Mention Muscle tone type (Normotonic/ Hypotonic or flaccid (Shaithilya)/ Hypertonic (Sankocha) – Clasp knife, Lead pipe, Cog wheel)	Inference
Upper limbs			
Lower limbs			

Reflexes: hyperreflexia/ hyporeflexia – *Shareera dhatu vyuhakara, sandhanakara shareerasya*:

Assess the reflexes of various sites with observation and your inference. Mention grades of reflex –

DTR Grading	
0	Absent (areflexia)
1	Diminished (hyporeflexia)
2	Average (normal)
3	Exaggerated (brisk)
4	Clonus, very brisk (hyperreflexia)

[Image Source: Quizlet Flash Cards]

Reflex	Observation (Hyper-reflexia/ Hypo-reflexia/ Areflexia)	Inference
Deep tendon reflexes		
Biceps jerk		
Triceps jerk		
Supinator jerk		
Jaw jerk		
Knee jerk		
Ankle jerk		
Superficial reflexes		
Cremasteric reflex		
Babinski sign		
Abdominal reflex		

Kampa/ Vepathu – Involuntary movements **-** Absent/ Present (If Present mention details below):

Rhythmic	Absent/ Present – Resting tremor	
Non rhythmic	Absent/ Present – Intention tremor/ Chorea/ Athetosis/ Ballismus/ Hemiballismus/ Myoclonus/ Asterixis	

Anga gati pareeksha/ Skalita gati pareeksha - Co-ordination assessment tests:

Assess the coordination of the patient using following methods, write your observation and inference below

	Name of test/ condition	**Coordination Present/ Absent**	**Inference**
Rapid alternating movements	Rapid alternating movements of arms		
	Finger tapping (Index finger and Thumb)		
	Rapid alternating movements of foot (Touching ball of foot with arms)		
Point to point movements	Finger nose test		
	Heel to shin test		
Gait	Tandem walking		
	Walking on toes and heels		
	Hop in place		
	Shallow knee bending		

	Rising from sitting position (without arm support)		
Stance	Romberg's test		
	Pronator drift test		
Dysdiadochokinesia		Present/ Absent	

Gati pareeksha – Gait:

Assess the gait of the patient, write your observation and inference below.

Gait – Intact/ Affected; If affected mention the type with inference (Scissor gait, Stamping gait, High stepping gait, Festinating gait, Ataxic gait, Hemiplegic gait)

Mention type of gait observed	Inference

Sparsha jnana pareeksha (Supti/ Sparsha ajnana, etc.) - Sensory system examination:

Sensation of touch:

Touch sensation	Dermatome	Observation	Inference
Crude touch			
Fine touch			
Two-point discrimination			
Point localization			

Sensation of Pain and pressure:

Pain and pressure	Dermatome	Observation	Inference
Pain			
Pressure			

Temperature sensation:

Temperature	Dermatome	Observation	Inference
Temperature			

Assess the joint position for various joints and write your observation and inference

Joint position	Joint	Observation	Inference

Assess the Vibration sensation on designated sites of body and write your observation and inference

Site of body	Observation	Inference

Assess the *Stereognosis and **Graphesthesia on designated sites of body and write your observation and inference

Site of body	Observation*	Inference

Site of body	Observation**	Inference

Write your inference on below mentioned points:

Sl. No	Observation	Dosha and dushya involvement	Inference to be made based on guna of vata
1			
2			
3			
4			

Conduct a comprehensive assessment by considering history (including upashaya anupashaya), a thorough physical examination, systemic examination, and relevant investigations. Additionally, perform a differential diagnosis (sapeksha and vyavachedaka nidana) based on the gathered data.

Teacher's signature

ROGA NIDAN EVAM VIKRITI VIGYAN ACTIVITY BOOK

SERIAL NO: 6 **CLINICAL NO: C 6.9 & 6.11**

1. Activity Name

Musculoskeletal system examination

2. Activity Description:

Perform and record musculoskeletal system examination of patient. Write your observations and inference on possible conditions the patient is suffering from.

3. Materials and Equipment:

Case format, Pen torch, Reflex hammer, Tuning fork, Measuring tape, Disposable tissues or wipes, Goniometer and Hand sanitizer.

4. Patient information:

Age:

Sex: M/ F/Others

Marital status:

Education:

Occupation:

Religion:

Socio-economic status:

Date of Consultation:

Out Patient Number:

Date of Admission:

In Patient Number:

Bed number:

Place of residence:

5. Musculoskeletal system examination:

Prashna pareeksha – Short history (Including upashaya anupashaya) – Relevant to the patient:

Darshnendriyataha pareeksha – Inspection (Mention location and side of examination wherever applicable):

Gati pareeksha – Gait:

Gait – Affected/ Not Affected; If affected mention the type

Mention type of gait observed	Inference
Antalgic gait	
Trendelenburg gait	
Any other	

Sl No	Joints	Inspection			
		Sandhi Shotha (Swelling)	Sandhi vaivarnya/ Raga (Redness)	Sandhi karma (Prasaarana akuncana)	Sandhi vaikalyata (Deformity)
1	Temporomandibular				
2	Shoulder				
3	Elbow				

4	Wrist and hand				
5	Hip				
6	Knee joint				
7	Ankle and foot				

Sparshanendriyataha pareeksha – Palpation (Mention location and side of examination wherever applicable):

Sl No	Joints	Palpation		
		Sandhi Shotha (Swelling)	**Sandhi ushnata (Local rise of Temperature)**	**Sandhi sparsha asahanata (Tenderness)**
1	Temporomandibular			
2	Shoulder			
3	Elbow			
4	Wrist and hand			
5	Hip			
6	Knee			
7	Ankle and foot			

Spine:

Feature to be observed	*Mention the abnormality observed	Inference
Deformity *(Kyphosis/ Scoliosis/ Lordosis/ Stepping in spine; Loss of normal curvatures at different levels)		
Gibbus		

Cervical spine:

Feature to be observed/ Tests	*Mention the abnormality observed	Inference
Tenderness		
Foramina compression test		
Lhermitte's sign (Lhermitte's phenomenon)		
Range of movements		

Lumbar spine:

Feature to be observed/ Tests	*Mention the abnormality observed	Inference
Tenderness		
Range of movements		
SLR test (Sakthnaha kshepam nigraha): Positive/ Negative		
If SLR Test is Positive Mention Range Bragard's test Lasegue's sign		
Femoral nerve root compression test: (Sakthnaha kshepam nigraha): Positive/ Negative		

Knee joint:

Feature to be observed/ Tests	*Mention the abnormality observed	Inference
Grind test		
Patellar tap test		

Baker’s cyst		
Crepitus		

Write your inference on below mentioned points:

Sl. No	Observation	Dosha and dushya involvement	Inference to be made based on guna of vata
1			
2			
3			
4			

Conduct a comprehensive assessment by considering history (including upashaya anupashaya), a thorough physical examination, systemic examination, and relevant investigations. Additionally, perform a differential diagnosis (sapeksha and vyavachedaka nidana) based on the gathered data.

Teacher’s signature

ROGA NIDAN EVAM VIKRITI VIGYAN ACTIVITY BOOK

SERIAL NO: 6 **CLINICAL NO: C 6.10 & 6.12**

1. Activity Name

Integumentary system examination

2. Activity Description:

Perform and record integumentary system examination of patient. Write your observations and inference on possible conditions the patient is suffering from.

3. Materials and Equipment:

Case format, Pen torch, Magnifying glass, Glass slide, Scale or skin callipers, Markers, Disposable tissues or wipes and Hand sanitizer.

4. Patient information:

Age:

Sex: M/ F/Others

Marital status:

Education:

Occupation:

Religion:

Socio-economic status:

Date of Consultation:

Out Patient Number:

Date of Admission:

In Patient Number:

Bed number:

Place of residence:

5. Integumentary system examination:

Prashna pareeksha – Short history (Including upashaya anupashaya) – Relevant to the patient:

Tvak pareeksha - Assessment of skin:

Inspection:

Varna/ Colour: Shyava aruna, Raga, Shweta, Krishna, Aruna, Raktaparyanta, Shyava, Taamra, Peetaparyanta, Neela, Peeta, Varnabheda, etc.

Size and shape: Khara paryanta, Utsanna madhya, Tanu paryanta, Hrsva, Dheergha, Mandala, Vishama, Vistrta, Yagjnopaveeta sankasha, etc.
Dome shaped – Trichoepithelioma, Flat topped - Verruca plana, Umbilicated - Molluscum contagiosum, Acuminate - Condylomata acuminata, Verrucous - Verruca vulgaris, Pedunculated – Skin tags.

Configuration: Annular - T. corporis, Granuloma annulare, Round/ discoid - Nummular eczema, discoid lupus. Polycyclic - Urticaria, Sub Cutaneous Lupus Erythematosus, Arcuate - Urticaria. Linear - Scabies burrow, Lichen nitidus. Kobners phenomenon. Reticular - Livedo reticularis, Serpiginous - cutaneous larva migrans, Targetoid lesions-

with 3 distinct zones. Erythema multiforme. Whorled - Incontinentia pigmenti.

Arrangement of lesion: Grouped/ herpetiform - HSV-1, Scattered

Distribution of lesions: Dermatomal/ zosteriform. Blaschkoid - Following lines of skin cell migration during embryogenesis. Longitudinal on limbs. Circumferential on trunk. Lymphangitic - strep. Or staph cellulitis. Sun exposed - Photodermatitis, Polymorphous Light Eruption, Subcutaneous Lupus Erythematosus, Sun protected - Parapsoriasis, Mycosis fungoides. Acral - Chilblains, Palmoplantar pustulosis. Truncal, Extensor – Psoriasis, Flexor-atopic dermatitis, Intertriginous – Candidiasis, Localized – Cellulitis, Generalized-exanthema, Drug eruptions. B/L (Bilateral) symmetrical – Vitiligo. Universal - Alopecia universalis.

***Type of skin lesion (Primary)**	**[1]Colour and pigmentation of lesion**	**Size**	**[1]Configuration and symmetry of lesion**	**Arrangement of lesion**	**Distribution over the body surface**
Vaivarnya – Macule/ Patch					
Sookshma pidaka - Papule					
Udvrtta pidaka - Plaque					
Granthi - Nodule					
Varathi dashta samsthana shotha - Wheal					

Sphota - Vesicle					
Vishphota – Bullae					
Putimamsa pidaka - Pustule					

*Type of skin lesion (Secondary)	Colour and pigmentation	Size	Shape and symmetry	Distribution over the body surface
Grushta Vrana - Erosion				
Vrana - Ulcer				
Daari - Fissure				
Sthira cipitika - Crust				
Shakala - Scale				
Charmakhya – Lichenification and Hyperkeratinisation				
Kshaya - Atrophy				
Rajyo ati kandu - Excoriation				
Vruna vastu – Scar				
Neelika, Mashaka – Nevus				
Pidaka – Comedone				
Bahya Krimi pidaka - Burrow of scabies				
Sirajala – Telangiectasia				
Any other				

Palpation/ sensation/ deformities/ odour:

*Enquire and perform for following parameters:

Palpation:

Specify – Rooksha, Khara, Parushya, Daha, Kleda, Snigdha, Shaitya, Ghana, etc.

Sensory symptoms: Specify – Toda (Sparsha akshamatva), Prakwatita daha, Tvak svapa, Harsha, etc.

Deformity: Tvak sankocha, Tvak ayaama, Tvak shosha, Kaunya, Angulipatana, Anga patina, Karna nasa bhanga, etc.

Odour/ Srava/ Krimi/ etc:

Visra gandha, etc.
Puya srava/ Lasika srava/ Puya rakta/ Lasika srava/ Bahu bahala picchila rakta srava etc.
Krimi janma, etc.

Type of skin lesion	***Palpation (Texture/ temperature)**	***Sensory symptoms (Tvak swapa/ daha)**	***Deformity**	***Odour/ Srava/ Krimi**

Special tests:

Special tests	**Observation**	**Inference**
Candle grease sign		
Auspitz's sign		
Koebner's phenomenon		
Blanch test		
Nikolsky's sign		

Any other observations		

Any other special tests and observations can be mentioned here:

Nakha pareeksha - Assessment of nail and nail bed:

*Abnormalities like clubbing of fingers, paronychia, onycholysis, Terry's nails, white spots (leukonychia), transverse white lines (Mees' lines), Pitting of nails - Psoriasis, and Beau's lines

Nail:

***Features to be examined**	**Observation**	**Inference**
Colour		
Shape		
Any lesion		

Nail bed:

Nail bed tenderness – Present/ Absent
Swelling – Present/ Absent
Redness – Present/ Absent

Kesha pareeksha - Assessment of hair:

*Distribution Khalitya (Alopecia Areata, Androgenetic Alopecia, Central Centrifugal Cicatricial Alopecia, Chemotherapy Induced

Alopecia, Frontal Fibrosing Alopecia, Lichen Planopilaris, Telogen Effluvium, Traction Alopecia, Trichotillomania) and Palitya (colour):

*Features to be examined	Observation	Inference
Quantity		
Distribution		
Texture		
Colour		

Tick Appropriate:

Onset of Khalitya: Kalaja/ Akalaja
Onset of Palitya: Kalaja/ Akalaja

Write your inference on below mentioned points:

Sl. No	Parameters to be assessed	Item observed in patient	Rationality
1	Dosha – Anubandhya and Anubandha dosha		
2	Dushya		

Conduct a comprehensive assessment by considering history (including upashaya anupashaya), a thorough physical examination, systemic examination, and relevant investigations. Additionally, perform a differential diagnosis (sapeksha and vyavachedaka nidana) based on the gathered data.

Teacher's signature

ROGA NIDAN EVAM VIKRITI VIGYAN ACTIVITY BOOK

SERIAL NO: 7 CLINICAL NO: C 7.1

Anemia evaluation – ABC (45 years) has been experiencing fatigue, weakness, and shortness of breath for the past few months. He has noticed a decrease in his exercise tolerance and feels tired even after minimal physical exertion. He denies any significant weight loss, changes in appetite, or other associated symptoms. His medical history is unremarkable, and he takes no regular medications. There is no family history of anemia or other significant medical conditions.

Initial Physical Examination:

- General appearance: Pale conjunctiva and skin
- Vital signs: Blood pressure 120/80 mmHg, pulse rate 90 bpm, respiratory rate 16 breaths per minute, temperature 98.6°F (37°C)
- Cardiovascular examination: Regular heart sounds, no murmurs
- Respiratory examination: Normal breath sounds
- Abdominal examination: No hepatosplenomegaly or masses
- Extremities: No peripheral edema or clubbing

List of Tests for Anaemia Evaluation:

Preliminary tests:

1. Complete Blood Count (CBC): Red blood cells (RBCs), Hemoglobin, Hematocrit, Mean corpuscular volume (MCV), Mean corpuscular hemoglobin (MCH), Mean corpuscular hemoglobin concentration (MCHC), and Red cell distribution width (RDW)
2. Peripheral Blood Smear
3. Reticulocyte Count

Further investigation:

4. Iron Studies: Serum iron, Total iron-binding capacity (TIBC), and Ferritin levels
5. Vitamin B12 and Folate Levels
6. Renal Function Tests
7. Bone Marrow Aspiration and Biopsy

Mention the patient preparation, sample collection, type of investigation, indication, and interpretation of Sl. No 1(Excluding platelets) and 2

Materials required: Format to fill, Laboratory methods/ Clinical pathology textbooks if required.

1. Complete Blood Count (CBC): Red blood cells (RBCs), hemoglobin, hematocrit, mean corpuscular volume (MCV), mean corpuscular hemoglobin (MCH), meancorpuscular hemoglobin concentration (MCHC), and Red cell distribution width (RDW)

Patient preparation:

Sample collection:

Type of investigation:

Indication:

Interpretation:

(Add additional page if required)

2. Peripheral Blood Smear:

Patient preparation:

Sample collection:

Type of investigation:

Indication:

Interpretation:

(Add additional page if required)

Teacher's signature

ROGA NIDAN EVAM VIKRITI VIGYAN ACTIVITY BOOK

SERIAL NO: 7 CLINICAL NO: C 7.2

UTI evaluation – ABC (30 years) complains of increased frequency of urination, accompanied by a burning sensation during urination and lower abdominal pain for the past two days. She denies any fever, back pain, or blood in the urine. ABC has a history of recurrent UTIs and is sexually active. She has no known allergies and takes no regular medications.

Initial Physical Examination:

- Vital signs: Blood pressure 120/80 mmHg, pulse rate 80 bpm, respiratory rate 16 breaths per minute, temperature 98.6°F (37°C)
- Abdominal examination: Mild tenderness in the lower abdomen
- Genitourinary examination: No abnormal findings, no cervical discharge

List of Tests for UTI Evaluation:

Preliminary tests:

1. Urinalysis:

   Urine physical examination (Appearance, Colour, Odor, Urine specific gravity)

   Urine chemical examination (Urine-pH, Sugar, Albumin, Bile pigment, Bile salt, Occult blood, Ketones, Urobilinogen)

   Urine microscopic examination (Epithelial cells, WBCs, RBCs, Leukocytes, Casts, Crystals and) bacteria (suggesting a bacterial infection)

2. Complete Blood Count (CBC)
3. C-reactive protein (CRP)

Further investigation:

4. Urine Culture and Sensitivity
5. Imaging Studies: Ultrasound or CT scan.
6. VDRL
7. Urethral Swab or Vaginal Swab.

Mention the patient preparation, sample collection, type of investigation, indication, and interpretation of Sl. No 1 and 6.

Materials required: Format to fill, Laboratory methods/ Clinical pathology textbooks if required.

1. Urinalysis: Urine physical examination (Appearance, Color, Odor, Specific gravity), chemical examination (Urine-pH, Sugar, Albumin, Bile pigment, Bile salt, blood, Ketone, Urobilinogen), Microscopic Examination (Epithelial cells, WBCs, RBCs, Leukocytes, Casts, Crystals) and bacteria (suggesting a bacterial infection):

Patient preparation:

Sample collection:

Type of investigation:

Indication:

Interpretation:

2. VDRL:

Patient preparation:

Sample collection:

Type of investigation:

Indication:

Interpretation:

(Add additional page if required)

Teacher's signature

ROGA NIDAN EVAM VIKRITI VIGYAN ACTIVITY BOOK

SERIAL NO: 7 CLINICAL NO: C 7.3

Hepatic evaluation – ABC (50 years) presents with complaints of persistent abdominal pain, yellowing of the skin and eyes (jaundice), and significant fatigue. He has a long history of heavy alcohol consumption, consuming approximately 8 to 10 alcoholic drinks per day for the past 20 years. He admits to having trouble controlling his alcohol intake and has previously experienced episodes of alcohol-related liver inflammation. He has no known allergies and takes no regular medications.

Initial Physical Examination:

- General appearance: Jaundiced, fatigue
- Vital signs: Blood pressure 130/80 mmHg, pulse rate 90 bpm, respiratory rate 18 breaths per minute, temperature 99.1°F (37.3°C)
- Abdominal examination: Tenderness in the right upper quadrant, hepatomegaly (enlarged liver), and possibly splenomegaly (enlarged spleen)
- Skin examination: Spider angiomas (tiny blood vessels visible on the skin), palmar erythema (redness of the palms), and jaundice

List of Tests for Alcoholic Liver Disease (ALD) Evaluation:

Preliminary tests:

1. Liver Function Tests: AST, ALT, GGT, Bilirubin levels, Protein levels, Prothrombin time, Clotting time.
2. Imaging Studies: Abdominal Ultrasound

Further investigation:

3. Complete Blood Count (CBC)
4. Imaging Studies: FibroScan or Transient Elastography
5. Viral Hepatitis Serology
6. Serum Ferritin and Iron Studies
7. Alpha-fetoprotein (AFP) Level
8. Coagulation Profile
9. Gastroscopy

Mention the patient preparation, sample collection, type of investigation, indication, and interpretation of Sl. No 1 and 8.

Materials required: Format to fill, Laboratory methods/ Clinical pathology textbooks if required.

1. Liver Function Tests: AST, ALT, and GGT, bilirubin levels, albumin levels, and prothrombin time, clotting time

Patient preparation:

Sample collection:

Type of investigation:

Indication:

Interpretation:

2. Coagulation profile

Patient preparation:

Sample collection:

Type of investigation:

Indication:

Interpretation:

(Add additional page if required)

Teacher's signature

ROGA NIDAN EVAM VIKRITI VIGYAN ACTIVITY BOOK

SERIAL NO: 7 CLINICAL NO: C 7.4

Renal evaluation – ABC (60 years) presents with complaints of persistent fatigue, decreased urine output, and swelling in her legs for the past few months. She has a medical history of hypertension and diabetes, both of which have been poorly controlled. She also reports a family history of kidney disease. She takes medications for her underlying conditions but admits to being non-compliant with her prescribed medications. She has no known allergies.

Initial Physical Examination:

- General appearance: Fatigue and lethargy
- Vital signs: Blood pressure 160/90 mmHg, pulse rate 80 bpm, respiratory rate 16 breaths per minute, temperature 98.6°F (37°C)
- Abdominal examination: No specific findings
- Extremities examination: Lower extremity edema

List of Tests for Chronic Kidney Disease (CKD) Evaluation:

Preliminary tests:

1. Renal Function Tests: Serum Creatinine, Blood Urea Nitrogen (BUN), Serum uric acid
2. Estimated Glomerular Filtration Rate (eGFR)
3. Urinalysis
4. Urine Albumin-to-Creatinine Ratio (ACR)
5. Imaging Studies: Renal Ultrasound

Further investigation:

6. Complete Blood Count (CBC)
7. Electrolyte Levels: Serum Potassium, Serum Sodium and Serum Chloride
8. Serum Calcium and Phosphate
9. Lipid Profile
10. Blood Glucose Levels
11. Kidney Biopsy

Mention the patient preparation, sample collection, type of investigation, indication, and interpretation of Sl. No 1, 4, 7 and 8

Materials required: Format to fill, Laboratory methods/ Clinical pathology textbooks if required.

1. Renal Function Tests: Serum Creatinine, Blood Urea Nitrogen (BUN), Serum uric acid

Patient preparation:

Sample collection:

Type of investigation:

Indication:

Interpretation:

2. Urine Albumin-to-Creatinine Ratio (ACR)

Patient preparation:

Sample collection:

Type of investigation:

Indication:

Interpretation:

3. Electrolyte Levels: Serum Potassium, Serum Sodium and Serum Chloride

Patient preparation:

Sample collection:

Type of investigation:

Indication:

Interpretation:

4. Serum Calcium and Phosphate

Patient preparation:

Sample collection:

Type of investigation:

Indication:

Interpretation:

Teacher's signature

ROGA NIDAN EVAM VIKRITI VIGYAN ACTIVITY BOOK

SERIAL NO: 7 CLINICAL NO: C 7.5

Thyroid evaluation – ABC (35 years) presents with complaints of persistent fatigue, unexplained weight gain, feeling cold all the time, and constipation. She has noticed a decrease in her energy levels and a gradual increase in her weight over the past few months. She has a family history of thyroid disorders. She takes no regular medications and has no known allergies.

Initial Physical Examination:

- General appearance: Fatigue and lethargy
- Vital signs: Blood pressure 120/80 mmHg, pulse rate 70 bpm, respiratory rate 16 breaths per minute, temperature 98.6°F (37°C)
- Skin examination: Dry skin, hair loss, and brittle nails
- Neurological examination: Slow reflexes, slow speech, and slowed mental processes

List of Tests for Hypothyroidism Evaluation:

Preliminary tests:

1. Thyroid Function Tests: Thyroid-Stimulating Hormone (TSH) Level, T3, T4,F T3, F T4
2. Antithyroid Antibodies (Anti-thyroid peroxidase)

Further investigation:

3. Lipid Profile
4. Complete Blood Count (CBC)
5. Additional tests: Basal Body Temperature, Serum Prolactin Level, Electrocardiogram (ECG)

Mention the patient preparation, sample collection, type of investigation, indication, and interpretation of Sl. No 1

Materials required: Format to fill, Laboratory methods/ Clinical pathology textbooks ifrequired.

1. **Thyroid Function Tests:** Thyroid-Stimulating Hormone (TSH) Level, T3, T4, F T3, FT4

   Patient preparation:

   Sample collection:

   Type of investigation:

   Indication:

   Interpretation:

Teacher's signature

ROGA NIDAN EVAM VIKRITI VIGYAN ACTIVITY BOOK

SERIAL NO: 7 CLINICAL NO: C 7.6

Diabetes Mellitus evaluation – XYZ (45 years) presents with complaints of increased thirst, frequent urination, and unexplained weight loss over the past few months. He also reports feeling tired and experiencing blurred vision. He has a family history of diabetes. He takes no regular medications and has no known allergies.

Initial Physical Examination:

- General appearance: Alert and oriented
- Vital signs: Blood pressure 130/80 mmHg, pulse rate 80 bpm, respiratory rate 16 breaths per minute, temperature 98.6°F (37°C)
- Skin examination: No specific findings
- Neurological examination: No abnormalities

List of Tests for Diabetes Mellitus Evaluation:

Preliminary tests:

1. Fasting Plasma Glucose (FPG) Test
2. Postprandial Plasma Glucose (PPPG)
3. Glycated Hemoglobin (HbA1c) Test

Further investigation:

4. Oral Glucose Tolerance Test (OGTT)
5. Urine Analysis
6. Lipid Profile
7. Kidney Function Tests: Serum Creatinine, Blood Urea Nitrogen (BUN), Urine Albumin-to-Creatinine Ratio (ACR)
8. C- peptide Level
9. Liver Function Tests
10. Thyroid Function Tests
11. Additional Tests: Autoantibodies (Islet cell antibodies, Insulin autoantibodies)

Mention the patient preparation, sample collection, type of investigation, indication, and interpretation of Sl. No 1 to 4 and Sl. No 8

Materials required: Format to fill, Laboratory methods/ Clinical pathology textbooks if required.

1. **Fasting Plasma Glucose (FPG) Test**

   Patient preparation:

   Sample collection:

   Type of investigation:

   Indication:

   Interpretation:

2. **Postprandial Plasma Glucose (PPPG)**

   Patient preparation:

Sample collection:

Type of investigation:

Indication:

Interpretation:

3. Glycated Hemoglobin (HbA1c) Test

Patient preparation:

Sample collection:

Type of investigation:

Indication:

Interpretation:

4. Oral Glucose Tolerance Test (OGTT)

Patient preparation:

Sample collection:

Type of investigation:

Indication:

Interpretation:

5. C – Peptide level

Patient preparation:

Sample collection:

Type of investigation:

Indication:

Interpretation:

(Add additional page if required)

Teacher's signature

ROGA NIDAN EVAM VIKRITI VIGYAN ACTIVITY BOOK

SERIAL NO: 7 CLINICAL NO: C 7.7

Stroke evaluation – ABC (60 years) presents with a sudden onset of weakness and numbness on the right side of his body. He has difficulty speaking and experiences confusion. There is no history of trauma or seizure activity. He has a past medical history of hypertension and smoking. He takes antihypertensive medication but is non-compliant with his treatment. He has no known allergies.

Initial Physical Examination:

- General appearance: Alert but appears anxious and distressed
- Vital signs: Blood pressure 160/90 mmHg, pulse rate 80 bpm, respiratory rate 18 breaths per minute, temperature 98.6°F (37°C)
- Neurological examination: Right-sided hemiparesis (weakness), right-sided sensory loss, dysarthria (difficulty speaking), and facial droop on the right side

List of Tests for Atherosclerotic Stroke Evaluation:

Preliminary tests:

1. Non-Contrast Computed Tomography (CT) Scan of the Brain
2. Magnetic Resonance Imaging (MRI) of the Brain
3. Lipid Profile: Total cholesterol, LDL cholesterol, HDL cholesterol, and Triglycerides

Further investigations:

4. Diabetic profile
5. Renal Function Tests
6. Electrocardiogram (ECG)
7. Carotid Doppler Ultrasound
8. Coagulation Profile
9. Complete Blood Count (CBC)
10. Additional Tests: Carotid Angiography, Holter Monitor
11. Transthoracic Echocardiogram (TTE) or Transesophageal Echocardiogram (TEE)

Mention the patient preparation, sample collection, type of investigation, indication, and interpretation of Sl. No 3

Materials required: Format to fill, Laboratory methods/ Clinical pathology textbooks if required.

1. **Total cholesterol, LDL cholesterol, HDL cholesterol, and triglycerides**

Patient preparation:

Sample collection:

Type of investigation:

Indication:

Interpretation:

(Add additional page if required)

Teacher's signature

ROGA NIDAN EVAM VIKRITI VIGYAN ACTIVITY BOOK

SERIAL NO: 7 CLINICAL NO: C 7.8

Arthritis evaluation – ABC (55 years) presents with complaints of joint pain, swelling, and stiffness in her hands, wrists, and knees. She reports that the symptoms have been persistent for the past few months and have been affecting her daily activities. She does not recall any recent injuries or trauma to the joints. She has no significant past medical history and no known allergies.

Initial Physical Examination:

- General appearance: Alert and in mild discomfort
- Vital signs: Blood pressure 120/80 mmHg, pulse rate 72 bpm, respiratory rate 16 breaths per minute, temperature 98.6°F (37°C)
- Musculoskeletal examination: Swelling and tenderness in the small joints of the hands and wrists, as well as the knees. Limited range of motion and crepitus may be noted.

List of Tests for Arthritis Evaluation:

Preliminary tests:

1. Rheumatoid Factor (RF), Antistreptolysin O (ASO) and Anti-Cyclic Citrullinated Peptide (anti-CCP) Antibody
2. Uric Acid Level
3. Erythrocyte Sedimentation Rate (ESR), C-Reactive Protein (CRP) Level
4. X-rays

Subsequent tests:

5. Antinuclear Antibodies (ANA) Profile
6. Complete Blood Count (CBC): White blood cell count and platelet
7. Joint Fluid Analysis
8. Ultrasound or Magnetic Resonance Imaging (MRI)

Mention the patient preparation, sample collection, type of investigation, indication, and interpretation of Sl. No 1 (RF & ASO), 3 (CRP)

Materials required: Format to fill, Laboratory methods/ Clinical pathology textbooks if required.

1. **RF/ ASO/ CRP**

   Patient preparation:

   Sample collection:

   Type of investigation:

   Indication:

   Interpretation:

(Add additional page if required)

Teacher's signature

ROGA NIDAN EVAM VIKRITI VIGYAN ACTIVITY BOOK

SERIAL NO: 7 CLINICAL NO: C 7.9

Fever evaluation – ABC (32 years) presents with complaints of persistent fever, abdominal pain, and gastrointestinal symptoms for the past week. She reports experiencing high-grade fever, reaching up to 104°F (40°C), along with severe headaches and body aches. She also mentions having abdominal pain, particularly in the right lower quadrant, and experiencing diarrhea with loose, watery stools. She denies any recent travel but mentions consuming food from street vendors. She has no significant past medical history and no known allergies.

Initial Physical Examination:

- General appearance: Fatigued, mildly dehydrated
- Vital signs: Blood pressure 120/80 mmHg, pulse rate 100 bpm, respiratory rate 18 breaths per minute, temperature 102.2°F (39°C)
- Abdominal examination: Tenderness in the right lower quadrant, possible hepatomegaly (enlarged liver)

List of Tests for Fever Evaluation:

Preliminary tests:

1. Complete Blood Count (CBC): Platelet, Total Leukocyte Count, Differential Leukocyte Count and Erythrocyte Sedimentation Rate
2. Bleeding time
3. Widal Test
4. Malarial parasite (Peripheral smear/ card test)
5. Dengue NS 1 – IgG, IgM (Card test)
6. Leptospirosis test
7. Urinalysis
8. Chest X-ray

Further investigation:

9. Blood Culture
10. Abdominal Ultrasound
11. Stool Culture
12. HIV Testing
13. Liver Function Tests

Mention the patient preparation, sample collection, type of investigation, indication, and interpretation of Sl. No 1, 2, 3, 4 and 5

Materials required: Format to fill, Laboratory methods/ Clinical pathology textbooks if required.

1. Complete Blood Count (CBC) – Platelet, Total Leukocyte Count, Differential Leukocyte Count, and Erythrocyte Sedimentation Rate

Patient preparation:

Sample collection:

Type of investigation:

Indication:

Interpretation:

2. Bleeding time

Patient preparation:

Sample collection:

Type of investigation:

Indication:

Interpretation:

3. Widal test

Patient preparation:

Sample collection:

Type of investigation:

Indication:

Interpretation:

4. **Malarial parasite (Peripheral smear/ card test)**

Patient preparation:

Sample collection:

Type of investigation:

Indication:

Interpretation:

5. **Dengue NS 1 – IgG, IgM (Card test)**

Patient preparation:

Sample collection:

Type of investigation:

Indication:

Interpretation:

(Add additional page if required)

Teacher's signature

ROGA NIDAN EVAM VIKRITI VIGYAN ACTIVITY BOOK

SERIAL NO: 7 CLINICAL NO: C 7.10

Male infertility evaluation – ABC (32 years) presents with a complaint of difficulty in conceiving a child with his partner despite trying for more than a year. He and his partner have been engaging in regular unprotected sexual intercourse without any success. ABC reports no prior history of fertility issues or significant medical conditions. He denies any recent infections, surgeries, or exposure to environmental toxins. His partner has undergone a thorough gynecological evaluation and has been deemed medically fit for conception.

Initial Physical Examination:

- General appearance: No apparent abnormalities
- Vital signs: Blood pressure 120/80 mmHg, pulse rate 80 bpm, respiratory rate 16 breaths per minute, temperature 98.6°F (37°C)
- External genital examination: Normal appearance of the penis, scrotum, and testes

List of Tests for Male Infertility Evaluation:

Preliminary tests:

1. Semen Analysis: Assess the quantity, quality, and motility of sperm. Parameters evaluated include sperm count, motility, morphology (shape), and presence of any abnormalities or infections.

Further investigation:

2. Hormonal Profile: Testosterone, Follicle-Stimulating Hormone (FSH), Luteinizing Hormone (LH), Prolactin
3. Ultrasound Imaging (Scrotal)
4. Post-Ejaculatory Urinalysis

Mention the patient preparation, sample collection, type of investigation, indication, and interpretation of Sl. No 1

Materials required: Format to fill, Laboratory methods/ Clinical pathology textbooks if required.

1. **Semen Analysis: Assess the quantity, quality, and motility of sperm. Parameters evaluated include sperm count, motility, morphology (shape), and presence of any abnormalities or infections**

   Patient preparation:

   Sample collection:

   Type of investigation:

   Indication:

   Interpretation:

(Add additional page if required)

Teacher's signature

ROGA NIDAN EVAM VIKRITI VIGYAN ACTIVITY BOOK

SERIAL NO: 7 CLINICAL NO: C 7.11

Helminthiasis evaluation – XYZ (35 years) presents to the clinic with complaints of persistent abdominal pain, nausea, and weight loss over the past month. He also mentions noticing worms in his stool. XYZ has no significant medical history and has never experienced similar symptoms before.

Initial Physical Examination:

Upon examination, the physician notices mild tenderness in the right lower quadrant of the abdomen. There are no other remarkable findings on physical examination

List of Tests for Ascariasis Evaluation:

Preliminary tests:

1. Stool Examination: (Colour, Consistency. Microscopy - Ova , Cyst, Pus

cells)Further investigation:

2. Complete Blood Count (CBC)
3. Imaging Studies (CT scan)

Mention the patient preparation, sample collection, type of investigation, indication, and interpretation of Sl. No 1

Materials required: Format to fill, Laboratory methods/ Clinical pathology textbooks if required.

1. **Stool Examination: (Colour, Consistency. Microscopy - Ova , Cyst, Pus cells)**

   Patient preparation:

Sample collection:

Type of investigation:

Indication:

Interpretation:

(Add additional page if required)

Teacher's signature

ROGA NIDAN EVAM VIKRITI VIGYAN ACTIVITY BOOK

SERIAL NO: 8 CLINICAL NO: C 8.1

1. **Activity Name**

   X-Ray reading (Basics – Positioning, etc.)

2. **Activity Description:**

   Evaluate chest X-Ray for positioning, rotation, and penetration.

3. **Materials and Equipment:**

   Format to fill, Books related to radiology if required, X Ray films.

4. **Basics of X Ray:**

Positioning:

Rotation:

Penetration:

Any other observations:

Write your inference on the given X-Ray:

Teacher's signature

ROGA NIDAN EVAM VIKRITI VIGYAN ACTIVITY BOOK

SERIAL NO: 8 CLINICAL NO: C 8.2

1. **Activity Name**

   X-Ray reading and interpretation (Chest)

2. **Activity Description:**

   Evaluate chest X-Ray for Airway and tracheobronchial tree, Bones and Bony Structures, Cardiac Silhouette, Diaphragm, Effusions (Pleural), Fields (Lung Fields), Gastric Bubble (Stomach), and Hilum. Write your comments on the given X-Ray.

3. **Materials and Equipment:**

   Format to fill, Books related to radiology if required, X Ray films.

4. **Chest X Ray:**

Airway and tracheobronchial tree:

Bones and Bony Structures:

Cardiac Silhouette:

Diaphragm:

Effusions (Pleural):

Fields (Lung Fields):

Gastric Bubble (Stomach):

Hilum:

Any other observations:

Write your inference on the given X-Ray:

Teacher's signature

ROGA NIDAN EVAM VIKRITI VIGYAN ACTIVITY BOOK

SERIAL NO: 8 CLINICAL NO: C 8.3

1. **Activity Name**

   X-Ray reading and interpretation (Bones and Joints)

2. **Activity Description:**

   Evaluate X-Ray for various bone and joints. Write your comments on the given X-Ray.

3. **Materials and Equipment:**

   Format to fill, Books related to radiology if required, X Ray films.

4. **Bones and joints X Ray:**

Study Details:

Imaging Modality: X-ray -

Body Part: (Specific bones or joints examined) -

Radiographic Views: (Specific views obtained) -

Technique: (Exposure details, if available) -

Findings:

List and describe the relevant bones or joints examined -

Provide a detailed description of the observed abnormalities, including fractures, dislocations, joint space narrowing, bone density changes, or any other significant findings -

Include measurements or quantitative details, if applicable -

Impression:

Provide a concise summary of the overall findings -

Mention any specific diagnosis, if possible -

Indicate the significance or clinical relevance of the observed abnormalities -

Recommend any additional imaging studies or consultations, if necessary -

Recommendations:

Suggest any further diagnostic steps or follow-up examinations -

Teacher’s signature

ROGA NIDAN EVAM VIKRITI VIGYAN ACTIVITY BOOK

SERIAL NO: 9 CLINICAL NO: C 9.1 & 9.2

1. **Activity Name**

   Basic ECG interpretation

2. **Activity Description:**

   Evaluate ECG for any abnormalities. Write your comments on the given ECG.

3. **Materials and Equipment:**

   Format to fill, Books related to ECG if required, ECG.

4. **ECG interpretation:**

ECG reporting:

ECG Technical Details:

A. ECG lead configuration (standard or modified) -
B. Paper speed (25 mm/s or 50 mm/s) -
C. Calibration (in millivolts per millimeter) -
D. Any artifacts or technical issues encountered during the recording -

Heart Rate and Rhythm:

A. Heart rate (calculated or measured) -
B. Rhythm interpretation (sinus rhythm, atrial fibrillation, etc.) -
C. Presence of any ectopic beats or arrhythmias -

P-Wave Analysis:

A. P-wave morphology (duration, amplitude, and shape) -
B. Presence of P-wave abnormalities (e.g., P-wave abnormalities indicating atrial enlargement) -

PR Interval:

A. PR interval duration -
B. Assessment of atrioventricular conduction -

QRS Complex:

A. QRS complex duration -
B. Assessment of ventricular conduction and morphology –

ST Segment:

A. ST segment morphology (elevation, depression, or isoelectric) -
B. Presence of ST segment abnormalities indicating myocardial ischemia or injury -

T-Wave Analysis:

A. T-wave morphology (symmetry, amplitude, and shape) -
B. Presence of T-wave abnormalities (inversion, flattening, or peaked T-waves) -

QT Interval:

A. QT interval duration -
B. Assessment of QT interval prolongation -

Axis and Intervals:

A. Electrical axis of the heart (normal or deviated) -
B. Measurement of other intervals (e.g., PR, QRS, QTc) -

Additional Findings:

A. Any additional findings, such as ventricular hypertrophy, chamber enlargement, or ST-Twave abnormalities -

Clinical Impression:

A. Interpretation and overall impression of the ECG -
B. Differential diagnosis and possible clinical implications –

Recommendations:

A. Suggested follow-up or additional investigations, if necessary -

Teacher's signature

ROGA NIDAN EVAM VIKRITI VIGYAN ACTIVITY BOOK

SERIAL NO: 10 CLINICAL NO: 10.1 to 10.5

Write in detail the case of a patient with details furnished under specific headings (For subheadings and reporting refer previous activities)

1. **Patient information:**

Age:

Sex: M/ F/Others

Marital status:

Education:

Occupation:

Religion:

Socio-economic status:

Date of Consultation:

Outpatient Number:

Date of Admission:

In Patient Number:

Bed number:

Place of residence:

2. **Pradhana Vedana with Kala prakarsha (Chief complaints with duration):**

3. **Vedanasammuchraya (History of present illness):**

4. Poorvavyadhi Vruttanta (History of Past illness):

5. Chikitsa Vruttanta (Treatment history):

6. **Kula Vruttanta (Family history) Along with pedigree chart:**

7. **Samajika Vruttanta (Social history):**

8. Vayaktika Vruttanta (Personal history):

9. **General physical examination**:

10. **Systemic examination/ Srotopareeksha** (General systemic and Local systemic/ Examination of affected system):

11. Investigations (Available reports and suggested investigations):

12. Differential diagnosis/ Sapekshanidana:

13. Vyadhi vinischaya (Diagnosis):

14. Samprapti ghataka (Samprapti ghataka of the patient based on history taking and examination)**:**

Dosha: Shareerika

Vriddhi / Kshaya
Samsarga / Sannipata: Sama samsarga / sannipata Or Vishama samsarga / sannipata
Anubandha - Anubandhya -
Dosha bheda:
Gati: Urdhva / Adha / Tiryak; Shakha / Koshta / Marma asthi sandhi

Dosha: Manasika

Raja / Tama

Dushya: Write Vriddhi/ Kshaya/ Dushti of
Dhatu (Specify)
Upadhatu (Specify)
Mala (Specify)
Manas (Specify)
Indriya (Specify)
Avayava (Specify)

Srotas: Primary srotas (Specify)
Secondary srotas (Specify)

Sroto dushti lakshana: Primary sroto dushti (Specify)
Secondary sroto dushti (Specify)

Agni: Koshtagni: Sama / Vishama / Teekshna / Manda
Dhatwagni: Sama / Manda
Bhutagni: Sama / Manda

Ama: Koshtastha ama / Dhatugata ama / Malarupi ama / Dosharupi ama

Udbhava sthana: Amashaya / Pakvashaya

Vyakta sthana: Sarva dehika / Sthanika (Specify)
Bahya rogamarga / Madhyama rogamarga / Abhyantara rogamarga

15. **Sadhyasadhyata** (with rationality)

Teacher's signature

Course curriculum for Second Professional BAMS

(PRESCRIBED BY NCISM)



Agad Tantra evam Vidhi Vaidyaka

(SUBJECT CODE : AyUG-AT)

(Applicable from 2021-22 batch, from the academic year 2023-24 onwards for 5 years or until further notification by NCISM, whichever is earlier)

ncism

।। आयुषे सर्वलोकानाम् ।।

SCAN ME

AT

BOARD OF AYURVEDA
NATIONAL COMMISSION FOR INDIAN SYSTEM OF MEDICINE
NEW DELHI-110058

NCISM

II Professional Ayurvedacharya (BAMS)

Subject Code : AyUG-AT

Summary

Total number of Teaching hours: 300			
Lecture hours(LH)-Theory		100	100(LH)
Paper I	100		
Non Lecture hours(NLH)-Theory		200	200(NLH)
Paper I	60		
Non Lecture hours(NLH)-Practical			
Paper I	140		

Examination (Papers & Mark Distribution)					
Item	**Theory Component Marks**	**Practical Component Marks**			
		Practical	**Viva**	**Elective**	**IA**
Paper I	100	100	60	(Set SA) 10	30
Sub-Total	100	200			
Total marks	300				

Important Note:-The User Manual II BAMS is a valuable resource that provides comprehensive details about the curriculum file. It will help you understand and implement the curriculum. Please read the User Manual II before reading this curriculum file. The curriculum file has been thoroughly reviewed and verified for accuracy. However, if you find any discrepancies, please note that the contents related to the MSE should be considered authentic.
In case of difficulty and questions regarding curriculum write to cur.imp@ncismindia.org

PREFACE

Agada Tantra, is one of the eight clinical branches (Ashtanga) of Ayurveda. This branch of clinical toxicity was considered as the stalwart of Ayurveda which popularized this science across several civilizations around the world. Many great explorers glorified the snake bite management existed in India and this paved way for the popularization of Ayurveda in several countries with Ayurvedic scriptures being translated to several languages and many scholars came to India to study this science. The subject encompasses the detailed study for several toxicological conditions ranging from animate, inanimate and other disease entities with an inherent toxic pathology that enables to apply the principles of Agada Tantra in several diseases of contemporary significance.

Poisons disrupts the homeostasis created by the three doshas. Agada Tantra details measures to re-establish the proper functioning of the dosha, dhatu, mala, srotas and to reinstate the vital force (Oja). To attain this, a judicious use of Agada formulations is necessary coupled with specific treatment procedures enshrined in the 24-fold treatments (Chaturvimsati Upakrama). A proper assessment of the patient with respect to the level of spread of poison in the body ascertained through the concept of Vega is utmost important as far as any successful management of poisoning is concerned. A thorough knowledge of all these is essential to adopt treatment of any poison or to extend it to any contemporary toxicological conditions like contact dermatitis, food poisoning etc. Current curriculum has been designed to unearth the scope of this subject as a clinicl branch which aims at empowering an undergraduate student to understand the current clinical toxicological manifestations under the theoretical and practical/clinical framework of Agada Tantra.

The present curriculum of Agada Tantra equips an undergraduate student to grasp the clinical utility of these concepts through an effective teaching-learning process involving cognitive, psychomotor and affective domains. Students will be guided through effective teaching-learning methods to understand the concepts through state-of-the-art techniques like activity based learning, problem based learning and group activities. Effective evaluation techniques are also been incorporated to make the student community learn this subject in its entirity and utilizes the spectrum of its theoretical, practical and clinical aspects.

INDEX

Course Code and Name of Course 5
Table 1- Course learning outcomes and matched PO 5
Table 2 : Contents of Course 6
Paper 1 6
Table 3: Learning objectives (Theory) of Course 12
Paper 1 12
List of Practicals 32
Table 4: Learning objectives (Practical) 33
Practical 1 33
Table 4a: List of Practical 40
Activity 42
Table 5- Teaching learning method 45
Table 6: Assessment Summary: Assessment is subdivided in A to H points 46
6 A-Number of Papers and Marks Distribution 46
6 B - Scheme of Assessment (formative and Summative) 46
6 C - Calculation Method for Internal assessment Marks 47
6 D - Evaluation Methods for Periodical Assessment 47
6 E Question Paper Pattern 48
6 F Distribution of theory examination 49
Paper 1 49
6 G Blue print of paper I 51
6 H Distribution of Practical Exam 53
References Books/ Resources 56
Abbreviations 57

Course Code and Name of Course

Course code	Name of Course
AyUG-AT	Agad Tantra evam Vidhi Vaidyaka

Table 1- Course learning outcomes and matched PO

SR1 CO No	A1 Course learning Outcomes (CO) AyUG-AT At the end of the course AyUG-AT, the students should be able to-	B1 Course learning Outcomes matched with program learning outcomes.
CO1	Demonstrate application of fundamental concepts of Agada Tantra, Vyavahara Ayurveda and Vidhi vaidyaka in real life situations.	PO1,PO2
CO2	Diagnose and manage acute and chronic poisoning due to Sthavara, Jangama and Kritrima visha along with their contemporary relevance.	PO1,PO2,PO3,PO4, PO5
CO3	Demonstrate application of concepts of Dushivisha, Garavisha and Viruddha ahara in prevention, diagnosis and management of diseases.	PO1,PO2,PO3,PO4, PO5
CO4	Demonstrate application of principles of Agada Tantra and therapeutic administration of common Agada yoga and Visha dravya in Clinical practice.	PO2,PO3,PO4,PO5, PO9
CO5	Appreciate research updates in relevance to Agada Tantra and apply for healthcare promotion and social awareness.	PO6,PO7,PO8,PO9
CO6	Demonstrate application of professional skills of Forensic Medicine in handling medico legal issues.	PO2,PO3,PO6
CO7	Demonstrate professional and ethical behavior in discharging the medico-legal duties and responsibilities in abidance to the law.	PO5,PO6,PO8,PO9

Table 2 : Contents of Course

Paper 1					
Sr. No	**A2 List of Topics**	**B2 Term**	**C2 Marks**	**D2 Lecture hours**	**E2 Non-Lecture hours**
1	**Concepts of Agada Tantra (Clinical Toxicology)** 1.1 Agada Tantra and Clinical Toxicology. 1.2 Scope of Agada Tantra. 1.3 Definition of visha and poison, synonyms, visha guna, difference between visha, madya and oja guna, visha gati, classification of visha and poison, sthavara and jangama visha adhishtana. 1.4 Difference between poison, venom and toxin. 1.5 Routes of administration of poison. 1.6 Mode of action of visha (visha gunanusara karma) and poison (Introduction to toxicokinetics) 1.7 Factors modifying the action of poison. 1.8 Visha vardhaka bhava and visha sankata 1.9 Vishavega, vegantara and sthavara visha veganusara lakshana and chikitsa. 1.10 Visha peeta and vishamukta lakshana.	1	13	8	1
2	**Visha Chikitsa (Management of Poisoning)** 2.1. Diagnosis of poisoning in living & dead 2.2. Chaturvimshati upakrama. 2.3. General principles of management of poisoning. 2.4. Duties of medical officer in case of suspected poisoning.	1		5	4
3	**Vishakta aahara pariksha and Viruddha ahara** 3.1. Sources of exposure of visha with contemporary relevance. 3.2. Vishakta aahara pariksha. 3.3. Adulteration and tests for its detection. 3.4. Techniques used in the detection of poisons. 3.5. Viruddha-ahara with contemporary relevance. 3.6. Food poisoning and amavisha.	1		3	2
4	**Garavisha and Dooshivisha** 4.1. Garavisha 4.2. Dooshivisha 4.3. Contemporary aspects of garavisha and dooshivisha. 4.4. Role of garavisha and dooshivisha in the manifestation of diseases 4.5. Research updates in garavisha and dooshivisha	1	12	7	2
5	**Visha Upadrava and diseases caused due to exposure to Visha/poisons**	1		4	2

	• 5.1 Visha upadrava • 5.2 Drug-induced toxicity • 5.3 Occupational hazards. • 5.4 Allergic manifestations • 5.5 Endocrine disrupters				
6	**Environmental Toxicology** • 6.1 Vishakta vayu, jala and bhumi (air, water and land pollution) • 6.2 Effect of biological, chemical and nuclear warfare. • 6.3 Ecotoxicology & biomagnification. • 6.4 Toxicovigilance.	2	11	2	5
7	**Dermatological manifestations of visha/poisons.** 7.1. Contact dermatitis and its management. 7.2. Signs and symptoms and management of abhyanga visha, lepa visha, vastra visha, paduka visha, abharana visha etc. with contemporary relevance. 7.3. Signs and symptoms and management of dermatological manifestations due to cosmetics, chemicals, occupational and other allergens. 7.4. Dermatological manifestation due to dooshivisha and garavisha. 7.5. Dermatological manifestation due to bites and stings.	2		6	2
8	**Therapeutic utility of Agada yoga** • 8.1 Dooshivishari agada • 8.2 Bilwadi agada • 8.3 Dashanga agada • 8.4 Murvadi agada • 8.5 Panchashirisha agada • 8.6 Vishaghna mahakashaya (Charaka Samhita) • 8.7 Ekasara gana (Sushruta Samhita)	2		1	0
9	**Sthavara visha – Poisons of Plant origin** 9.1. Cardiac Poisons - Vatsanabha, Karaveera, Digitalis, Tobacco and Cerbera odollam.	2	17	4	2

	9.2. Neurotoxic Poisons- Kupeelu, Ahiphena, Dhattura, Bhanga. 9.3. Irritant Poisons - Jayapala, Gunja, Bhallataka, Arka, Snuhi, Langali.				
10	**Sthavara Visha – Poisons of Metallic origin** 10.1. Arsenic. 10.2. Mercury. 10.3. Lead. 10.4. Copper	2		4	2
11	**Jangama Visha** • 11.1. Sarpa visha 11.2. Loota visha 11.3. Vrischika visha 11.4. Mushika visha and its contemporary relevance. • 11.5. Alarka visha and its contemporary relevance. 11.6. Keeta visha 11.7. Vector borne diseases.	2		10	6
12	**Kritrima visha** • 12.1. Inorganic Acids – Sulphuric acid, Hydrochloric acid, Nitric acid. • 12.2. Organic Acids - Oxalic acid, Carbolic acid, Formic acid. 12.3. Alkalies - Potassium hydroxide and Sodium hydroxide. 12.4. Asphyxiants – Carbon monoxide, Carbon dioxide. 12.5. Non-metallic poisons – Phosphorous, cyanide 12.6. Hydrocarbons – Kerosene. 12.7. Agrochemical Poisoning – Organo-phosphorus compounds, Carbamates, Organo-chlorine compounds, Aluminium phosphide. 12.8. Household poisons.	3	12	2	0
13	**Substances of abuse** 13.1. Madya and madatyaya, Alcoholism. 13.2. Addiction - Alcohol, Bhang, Opioids, Tobacco and Digital addiction. 13.3. Drugs of abuse- Lysergic acid diethylamide (LSD) and 3,4-Methylenedioxy methamphetamine (MDMA).	3		4	3

	13.4. Narcotic Drugs and Psychotropic Substances (NDPS) Act.				
14	**Agada Tantra perspectives on cancer** 14.1. Toxic carcinogens. 14.2. Toxicities due to chemo and radiotherapy and its Ayurvedic approach. 14.3. Agada and visha dravya prayoga in the prevention and management of cancer along with its research updates.	3		2	4
15	**Forensic medicine (Vyavahara Ayurveda) and Medical jurisprudence (Vidhi vaidyaka):** • 15.1 Forensic Medicine and Medical Jurisprudence. 15.2 Introduction to Indian Penal Code, Indian Evidence Act and Criminal Procedure Code.	1	10	1	0
16	**Vaidya sadvritta : Duties and Responsibilities of medical practitioner** • 16.1 Vaidya sadvritta, medical ethics and code of conduct, Charaka oath and Hippocratic oath. • 16.2 NCISM - constitution, objectives and functions. • 16.3 Duties, rights and privileges of a registered medical practitioner. • 16.4 Consent, professional secrecy and privileged communication. • 16.5 Professional negligence, professional misconduct and unethical practices. • 16.6 Defenses in medical negligence suits. • 16.7 Medical records. • 16.8 Consumer Protection Act.	1		6	4
17	**Legal Procedures** 17.1. Courts and their powers 17.2. Inquest, evidence and witnesses 17.3. Court procedures: summons, oath, recording of evidence and conduct money. 17.4. Conduct of a medical professional in the court of law.	1		4	4
18	**Personal identity**	1		2	2

	18.1. Identification data 18.2. Age 18.3. Race, religion, sex. 18.4. Moles, tattoos, scars, occupational marks & hairs. 18.5. Hand writing, dactylography, DNA typing and superimposition				
19	**Thanatology** 19.1. Death 19.2. Signs of death. 19.3. Medicolegal autopsy and exhumation. 19.4. The Transplantation of Human Organs and Tissues Act (THOTA).	2	12	6	2
20	**Asphyxial deaths** 20.1. Hanging. 20.2. Strangulation and suffocation 20.3. Drowning.	2		4	2
21	**Injury** 21.1. Basics of injury 21.2. Mechanical injury 21.3. Firearm injury 21.4. Thermal injury 21.5. Dowry death	2		5	3
22	**Pregnancy, delivery and abortion** • 22.1 Medico-legal aspects of pregnancy, delivery, infanticide and battered baby syndrome. • 22.2 Abortion, Medical Termination of Pregnancy (MTP) Act and Pre-Conception and Pre-Natal Diagnostic Techniques (PCPNDT) Act. • 22.3 Medico-legal aspects of artificial insemination and surrogacy.	3	6	2	3
23	**Sexual offences** 23.1. Rape 23.2. Medico-legal aspects of sexual offences 23.3. Protection of Children from Sexual Offences (POCSO) Act	3		2	1
24	**Forensic psychiatry.** 24.1. Common symptoms associated with psychiatric disorders 24.2. Lucid interval	3	7	2	2

	24.3. Civil and criminal responsibilities of a mentally ill person 24.4. Mental Health Act (MHA)				
25	**Forensic science laboratory** 25.1. Hierarchy and major divisions of forensic lab services. 25.2. Newer techniques and recent advances - polygraphy, narcoanalysis, DNA profiling.	3		1	0
26	**Laws, Acts, Rules and Regulations** 26.1 Clinical Establishments Act 26.2 State AYUSH registration board rules and regulations. 26.3 Medicare Service Persons and Medicare Service Institutions (Prevention of violence and damage or loss to property) Act, 2008. 26.4 Drugs and Cosmetics Act and Rules – Schedules related to poison. 26.5 The Occupational Safety, Health and Working Conditions Code, 2020 26.6 Employees State Insurance Act, 1948. 26.7 Rights of Person with Disability Act, 2016.	3		3	2
Total Marks			**100**	**100 hr**	**60 hr**

Table 3: Learning objectives (Theory) of Course

Paper 1									
A3 Course outcome	**B3** Learning Objective (At the end of the session, the students should be able to)	**C3** Domain/sub	**D3** Must to know / desirable to know / Nice to know	**E3** Level Does/ Shows how/ Knows how/ Know	**F3** T-L method	**G3** Assessment (Refer abbreviations)	**H3** Formative/ summative	**I3** Term	**J3** Integration
Topic 1 Concepts of Agada Tantra (Clinical Toxicology) (Lecture :8 hours, Non lecture: 1 hours)									
CO1	Define Agada Tantra and Toxicology. Describe the scope of Agada Tantra in the present era.	CK	MK	K	L&PPT	T-EMI,T- EW	F&S	I	
CO1	Define visha and poison. Enlist its synonyms.	CK	MK	K	L&PPT	T-EMI	F&S	I	
CO1	Differentiate between poison,venom and toxin.	CK	MK	K	L,L&PPT	P-VIVA	F&S	I	
CO1	Describe classification of visha & poison	CK	MK	K	L&PPT	T-EMI,P-VIVA	F&S	I	
CO1	Describe sthavara and jangama visha adhisthana.	CK	MK	K	L&PPT	T- EW	F&S	I	
CO1	Describe the routes of administration of poison.	CC	MK	K	L&PPT	T- EW,P-VIVA	F&S	I	
CO1	Enlist visha guna and differentiate between visha, madya and oja	CK	MK	K	L&PP	T-EMI	F&S	I	

	guna.				T				
CO1	Describe the mode of action of visha (visha gunanusar karma) & poison (Introduction to toxicokinetics).	CC	MK	KH	L,L&PPT,L&GD	T-EMI,T- EW	F&S	I	
CO1	Describe the factors modifying the action of poison.	CC	MK	KH	L&PPT	T- EW	F&S	I	
CO1	Describe vishavardhaka bhava and visha sankata.	CC	MK	KH	L&PPT	T-EMI,T-EW,P-VIVA	F&S	I	
CO1	Describe visha vega & vegantara	CK	DK	K	L&PPT	T-EMI,P-VIVA	F&S	I	
CO1	Describe sthavara visha veganusara lakshana and chikitsa	CK	MK	K	L,L&PPT	T-EMI	F&S	I	
CO1	Describe vishapeeta and vishamukta lakshana.	CK	MK	K	L&GD	T-EMI,P-VIVA	F&S	I	
Topic 2 Visha Chikitsa (Management of Poisoning) (Lecture :5 hours, Non lecture: 4 hours)									
CO2	Describe the diagnosis of poisoning in living and dead.	CAP	MK	KH	L&PPT	T-EMI,T-EW,P-VIVA	F&S	I	
CO2	Enumerate and discuss chaturvimshati upakrama	CC	MK	KH	L&PPT	T- EW,P-VIVA	F&S	I	
CO2	Describe the general principles of managment of poisoning.	CAP	MK	KH	L&PPT	T-EMI,P-VIVA	F&S	I	V-KC
CO2	Describe the duties of medical officer in case of suspected poisoning.	CK	MK	K	L&PPT	T-EMI,P-VIVA	F&S	I	
Topic 3 Vishakta aahara pariksha and Viruddha ahara (Lecture :3 hours, Non lecture: 2 hours)									

CO1,CO2,CO3	Explain the various sources of exposure of visha like anna, paana, vastra, abhyanga, lepa, paduka, abharana, etc.	CK	DK	K	L&PPT,L&GD	T- EW,CL-PR,M-CHT	F&S	I	
CO1,CO2,CO3	Describe the Ayurvedic methods of detection of food and beverages contaminated with visha.	CC	MK	KH	L&PPT,L_VC,SDL,D	T- EW,P-VIVA,P-EXAM	F&S	I	
CO1,CO2,CO3	Define adulteration, describe the methods of detection of adulterants and its relevance in Agada Tantra.	CAP	DK	KH	L_VC,SDL,PT	T- EW,P-VIVA,P-EXAM,OSPE,RK	F&S	I	
CO1,CO2,CO3	Describe the modern analytical techniques for the detection of poison (in contaminated articles) like chromatography, spectroscopy, etc.	CC	NK	KH	L&PPT,L&GD,L_VC	T- EW,P-VIVA,CL-PR	F&S	I	
CO1,CO2,CO3	Define viruddha ahara and explain its types.	CC	MK	KH	L&PPT,L&GD,BS	T- EW,P-VIVA,INT	F&S	I	
CO1,CO2,CO3	Discuss and illustrate the contemporary importance of viruddha ahara with examples	CAN	MK	KH	L&GD,BS,SDL	T- EW,QZ,CL-PR	F&S	I	
CO1,CO2,CO3	Discuss the application of concepts of viruddha ahara in the prevention and management of diseases.	CAP	MK	KH	L&GD,BS,SDL	T- EW,P-VIVA,CR-RED	F&S	I	
CO1,CO2,CO3	Describe food poisoning, its types and management.	CC	MK	KH	L&PPT,L&	T- EW,P-VIVA,CR-RED	F&S	I	

					GD,L_VC, CD				
CO1,CO2,CO3	Discuss the clinical application of principles of Agada Tantra in the management of food poisoning.	CAP	MK	KH	L&GD,BS, CBL, SDL	T- EW,P-VIVA,CL-PR	F&S	I	
CO1,CO2,CO3	Describe the concept of amavisha.	CC	MK	KH	L&PPT,L&GD,L_VC	T- EW,P-VIVA	F&S	I	
Topic 4 Garavisha and Dooshivisha (Lecture :7 hours, Non lecture: 2 hours)									
CO1,CO3	Describe the various definitions of garavisha.	CK	MK	K	L&PPT	T- EW	F&S	I	
CO1,CO3	Describe the clinical presentations of garavisha.	CC	MK	KH	L&PPT	T- EW	F&S	I	
CO1,CO3	Understand and explain the management principles of garavisha.	CC	MK	KH	L&PPT	T- EW	F&S	I	
CO1,CO3	Describe the various definitions of dooshivisha.	CC	MK	KH	L&PPT	T- EW	F&S	I	
CO3	Describe the clinical presentations of dooshivisha.	CC	MK	KH	L&PPT	T- EW	F&S	I	
CO3,CO4	Describe the principles of management of dooshivisha.	CC	MK	KH	L&PPT,DIS	T- EW,P-REC	F&S	I	
CO3,CO4	Discuss the application of the concept of dooshivisha and	CAP	MK	KH	L&G	P-VIVA	F&S	I	

	garavisha and its management in day to day clinical practice.				D				
CO3,CO5	Discuss the recent research updates in the concept of garavisha and dooshivisha.	CAN	MK	KH	L&GD,PER	P-VIVA,CL-PR	F&S	I	
CO1,CO3,CO4	Describe garavisha and dooshivisha as an etiology for the diseases of present era.	CAP	MK	KH	DIS,BS,FC	P-VIVA,CL-PR	F&S	I	
Topic 5 Visha Upadrava and diseases caused due to exposure to Visha/poisons (Lecture :4 hours, Non lecture: 2 hours)									
CO1,CO3	Describe visha upadrava.	CK	MK	K	L&PPT	T- EW,P-VIVA	F&S	I	
CO2,CO3,CO4	Define drug induced toxicity and discuss its Agada Tantra perspective.	CC	MK	KH	L&GD,L_VC,BS	T- EW,T-OBT,P-VIVA	F&S	I	
CO2,CO3,CO4	Discuss the application of principles of Agada Tantra in drug induced hepatotoxicity, nephrotoxicity and neurotoxicity.	CAP	MK	KH	L&PPT,CBL	T- EW,P-VIVA,CL-PR	F&S	I	
CO2,CO3,CO4	Discuss various occupational poisons and their health hazards.	CC	MK	KH	L&PPT,PBL,SDL	T-OBT,P-VIVA,M-CHT,M-POS	F&S	I	H-SW
CO2,CO3,CO4	Discuss the application of principles of Agada Tantra in occupational diseases caused due to pollution, paints, pesticides, fertilizer and other chemicals.	CC	DK	KH	L&PPT,ML	QZ ,CL-PR,M-CHT,M-POS	F&S	I	
CO2,CO3,CO4	Define and discuss allergy, types of allergens and its understanding as per Ayurveda.	CC	MK	KH	L&PPT,DIS,BS,C	INT,CR-RED	F&S	I	

					BL				
CO2,CO3,CO4	Discuss the application of the treatment principles of Agada Tantra in various allergic manifestations.	CAP	MK	KH	L&GD,BS,CBL	T-EMI,P-VIVA,PRN,CL-PR	F&S	I	
CO2,CO3,CO4	Define and enlist endocrine disruptors and discuss its Agada Tantra perspectives.	CAP	DK	KH	L&PPT,DIS,BS,CBL	CL-PR,M-CHT,COM	F&S	I	
Topic 6 Environmental Toxicology (Lecture :2 hours, Non lecture: 5 hours)									
CO4,CO5	Define environmental toxicology.	CK	DK	K	L&PPT,DIS	PRN,M-POS	F&S	II	
CO3,CO4,CO5	Describe the lakshanas and chikitsa of vishakta bhoomi, vishakta jala, and vishakta vayu.	CK	DK	K	L&PPT	P-VIVA,P-MOD	F&S	II	
CO4,CO5	Define pollution. Describe various pollutants and explain water pollution, soil pollution, air pollution,along with their health hazards.	CK	DK	KH	L&PPT,BS	T- EW,T-CS,PRN,P-MOD	F&S	II	
CO4,CO5	Describe the health effects of biological, chemical and nuclear warfare.	CK	NK	K	L&GD,SDL	PRN,QZ	F&S	II	
CO4,CO5	Define ecotoxicology & biomagnification.	CK	NK	KH	L&GD,SDL	PRN,CL-PR	F&S	II	
CO4,CO5	Explain the concept of toxicovigilance	CC	DK	K	FC,SDL	P-POS,CL-PR,CR-RED	F	II	
Topic 7 Dermatological manifestations of visha/poisons. (Lecture :6 hours, Non lecture: 2 hours)									

CO3,CO4	Describe the clinical presentations and diagnosis of paduka visha, abharana visha, vastra visha, lepa visha, abhyanga visha, etc.	CAP	MK	KH	L&PPT,DIS,CBL,CD	T- EW,P-CASE,CL-PR	F&S	II	
CO3,CO4	Discuss the management of paduka visha, abharana visha, vastra visha, lepa visha, abhyanga visha, etc.	CAN	MK	KH	L&PPT,DIS,CBL,PER	T- EW,P-EXAM,P-CASE,CL-PR	F&S	II	
CO3,CO4	Describe contact dermatitis and its types.	CK	MK	K	L&PPT	T- EW,P-VIVA	F&S	II	
CO3,CO4	Discuss the application of treatment principles of Agada Tantra in the contact dermatitis.	CAP	MK	KH	L&PPT,CBL	P-VIVA,P-CASE,CL-PR	F&S	II	
CO3,CO4	Discuss the dermatological conditions caused due to garavisha and dooshivisha.	CAP	MK	KH	L&PPT,DIS,CBL,CD	T- EW,P-VIVA,P-CASE	F&S	II	
CO3,CO4	Discuss the application of principles of treatment of garavisha and dooshivisha in the management of dermatological manifestations.	CAP	MK	KH	L&PPT,DIS,CBL	P-VIVA,P-CASE,CL-PR	F&S	II	
CO3,CO4	Discuss the daignosis and application of the treatment principles of Keeta visha in dermatological manifestations due to bites & stings.	CAP	MK	KH	L&PPT,DIS,CBL,SDL	T- EW,P-VIVA,P-CASE,CL-PR	F&S	II	
Topic 8 Therapeutic utility of Agada yoga (Lecture :1 hours, Non lecture: 0 hours)									
CO1,CO2,CO	Enlist ingredients and discuss the therapeutic utility of	CAP	MK	KH	L&PP	T- EW,P-	F&S	II	

3,CO4	Doohivishari Agada, Bilwadi Agada, Dashanga Agada, Murvadi agada and Panchashririsha Agada.				T,DIS ,CBL	CASE			
CO1,CO2,CO 3,CO4	Enlist and discuss the ingredients of vishaghna mahakashaya (Charaka Samhita) and ekasara gana (Sushruta Samhita).	CAP	MK	KH	L&PP T,BS, CBL, FC	T- EW,P-VIVA	F&S	II	
Topic 9 Sthavara visha – Poisons of Plant origin (Lecture :4 hours, Non lecture: 2 hours)									
CO2,CO4,CO 6	Describe the active principles, mode of action, fatal dose, fatal period, signs and symptoms, management, post-mortem appearance and medicolegal aspects of vatsanabha.	CAP	MK	KH	L&PP T	T- EW,P-VIVA,P-ID	F&S	II	
CO2,CO4	Mention therapeutic dose and enlist two important formulations of vatsanabha.	CK	NK	K	L	T-EMI,P-VIV A,P-EXAM	F&S	II	
CO2,CO4,CO 6	Describe the active principles, mode of action, fatal dose, fatal period, signs and symptoms, management, post-mortem appearance and medicolegal aspects of karaveera.	CAP	MK	K	L&PP T	T- EW,P-VIVA,P-ID	F&S	II	
CO2,CO4	Mention therapeutic dose and enlist two important formulations of karaveera.	CK	NK	K	L	T- EW,T- ME Qs,P-VIVA,P-EXAM	F&S	II	
CO2,CO6	Describe mode of action, fatal dose, fatal period, signs and symptoms, management, post-mortem appearance and medicolegal aspects of digitalis.	CAP	NK	K	L&PP T	T- EW,P-VIVA	F&S	II	
CO2,CO6	Describe mode of action, fatal dose, fatal period, signs and symptoms, management, post-mortem appearance and medicolegal aspects of tobacco.	CK	MK	K	L&PP T	T- EW,P-ID	F&S	II	
CO2,CO6	Describe mode of action, fatal dose, fatal period, signs and symptoms, management, post-mortem appearance and	CK	DK	K	L&PP T	T- EW	F&S	II	

	medicolegal aspects of Cerbera odollam.								
CO2,CO4,CO6	Describe the active principles, mode of action, fatal dose, fatal period, signs and symptoms, management, post-mortem appearance and medicolegal aspects of Kupeelu.	CK	MK	KH	L&PPT	T- EW,P-VIVA,P-ID	F&S	II	
CO2,CO6	Mention therapeutic dose and enlist two important formulations of kupeelu.	CK	NK	K	L	T-EMI	F&S	II	
CO2,CO4,CO6	Describe the active principles, mode of action, fatal dose, fatal period, signs and symptoms, management, post-mortem appearance and medicolegal aspects of ahiphena.	CK	MK	KH	L&PPT	T- EW,P-VIVA,P-ID	F&S	II	
CO2,CO6	Mention therapeutic dose and enlist two important formulations of ahiphena.	CK	NK	K	L	T-EMI	F&S	II	
CO2,CO4,CO6	Describe the active principles, mode of action, fatal dose, fatal period, signs and symptoms, management, post-mortem appearance and medicolegal aspects of dhatura.	CK	MK	KH	L&PPT	T- EW,P-VIVA,P-ID	F&S	II	
CO2,CO6	Mention therapeutic dose and enlist two important formulations of dhatura.	CK	NK	K	L	T-EMI	F&S	II	
CO2,CO4,CO6	Describe the active principles, mode of action, fatal dose, fatal period, signs and symptoms, management, post-mortem appearance and medicolegal aspects of Bhanga.	CK	MK	K	L&PPT	T- EW,P-VIVA,P-EXAM,P-ID	F&S	II	
CO2,CO6	Mention therapeutic dose and enlist two important formulations of bhanga.	CK	NK	K	L	T-EMI	F&S	II	
CO2,CO4,CO6	Describe the active principles, mode of action, fatal dose, fatal period, signs and symptoms, management, post-mortem appearance and medicolegal aspects of jayapala.	CK	MK	K	L&PPT	T- EW,P-VIVA,P-ID	F&S	II	
CO4	Mention therapeutic dose and enlist two important formulations	CK	NK	K	L	T-EMI,P-	F&S	II	

	of jayapala.					EXAM			
CO2,CO4,CO 6	Describe the active principles, mode of action, fatal dose, fatal period, signs and symptoms, management, post-mortem appearance and medicolegal aspects of gunja.	CAP	DK	KH	L&PP T	T- EW,P-VIVA,P-ID	F&S	II	
CO4	Mention therapeutic dose and enlist two important formulations of gunja.	CK	NK	KH	L	T- EW,P-VIVA,P-EXAM	F&S	II	
CO2,CO4,CO 6	Describe the active principles, mode of action, fatal dose, fatal period, signs and symptoms, management, post-mortem appearance and medicolegal aspects of bhallataka.	CAP	MK	KH	L&PP T	T- EW,P-VIVA,P-ID	F&S	II	
CO4	Mention therapeutic dose and enlist two important formulations of bhallataka.	CK	NK	K	L	T-EMI,P-VIVA,P-EXAM	F&S	II	
CO2	Describe the active principles, mode of action, fatal dose, fatal period, signs and symptoms, management, post-mortem appearance and medicolegal aspects of arka and snuhi.	CK	DK	K	L&PP T	T- EW,P-VIVA	F&S	II	
CO2,CO4,CO 6	Describe the active principles, mode of action, fatal dose, fatal period, signs and symptoms, management, post-mortem appearance and medicolegal aspects of langali.	CK	NK	K	L&PP T	T- EW,P-VIVA,P-ID	F&S	II	
Topic 10 Sthavara Visha – Poisons of Metallic origin (Lecture :4 hours, Non lecture: 2 hours)									
CO2	Describe the mode of action, fatal dose, fatal period, signs and symptoms, management, post-mortem appearance, medicolegal aspects of acute poisoning of 1. Arsenic 2. Mercury 3. Lead 4. Copper	CK	MK	K	L&PP T,PBL	T-EMI,T-MEQs,P-VIVA	F&S	II	

	Write its therapeutic dose and enlist any four important formulations.								
CO1,CO2	Discuss the Ayurvedic concepts for the diagnosis and management of chronic heavy metal toxicity.	CC	DK	K	L&PPT,L&GD	T-EMI,T-MEQs,P-VIVA	F&S	II	
CO2,CO3,CO4	Discuss the toxicological implications of improperly prepared medicines with special reference to those containing metals, minerals and poisonous substances.	CAP	NK	KH	L&PPT,CBL,FC	P-VIVA	F&S	II	
Topic 11 Jangama Visha (Lecture :10 hours, Non lecture: 6 hours)									
CO2,CO5	Describe sarpa bheda and ennumerate the indentification features of darvikara, mandali and rajimantha sarpa.	CAP	MK	KH	L&PPT,BS,CBL	T- EW,P-VIVA,P-EXAM	F&S	II	
CO2,CO5	Classify snakes and describe the features of venomous and non venomous snakes and identify their bites.	CAN	MK	K	L&PPT	T- EW,P-VIVA,P-EXAM	F&S	II	
CO2,CO5	Describe the fatal dose, fatal period, signs and symptoms of common cobra, king cobra, russel's viper, saw scaled viper, pit vipers and common krait.	CAN	MK	KH	L&PPT,DIS,BS,CBL	T- EW,T-CS,P-VIVA,P-EXAM	F&S	II	
	Describe the samanya lakshana and samanya chikitsa of darvikara, mandali and rajimanth sarpa damsha.	CK	MK	K	L	T-EMI	F&S	II	
CO2,CO5	Describe the management of snake bites according to recent WHO snake bite management guidelines.	CAN	MK	KH	L&PPT,CBL,PER,CD	T- EW,P-VIVA,P-EXAM	F&S	II	
CO2,CO5	Describe the classification, diagnosis, samanya lakshana and chikitsa of lootavisha with its contemporary aspects.	CAN	MK	KH	L&PPT,CB	T- EW,P-VIVA	F&S	II	

					L				
CO2,CO5	Describe the classification, diagnosis, samanya lakshana and chikitsa of vrischika damsha (Scorpion Sting) along with its contemporary aspects.	CK	MK	K	L&PPT,CBL,CD	T- EW,P-VIVA,P-EXAM	F&S	II	
CO2,CO4	Describe leptospirosis and rat bite fever with special reference to mushika visha.	CK	NK	K	L,CBL	T- EW	F&S	II	
CO2,CO5	Describe rabies and its management with special reference to alarka visha.	CK	DK	KH	L&GD,CBL	T- EW,P-VIVA	F&S	II	
CO2,CO5	Describe the classification of keeta, samanya sakshana and chikitsa of keeta damsha with special importance to regional prevalence.	CAN	DK	KH	L&PPT,CBL	T- EW	F&S	II	
CO2,CO5	Discuss the application of visha chikitsa in vector borne diseases like chikungunya, dengue and malaria.	CAP	DK	KH	L&PPT,DIS	P-VIVA	F&S	II	
Topic 12 Kritrima visha (Lecture :2 hours, Non lecture: 0 hours)									
CO2	Describe the action of poison, fatal dose, fatal period, signs and symptoms, management, post mortem appearance and medico legal aspects of Inorganic acids - Sulphuric acid, Hydrochloric acid and Nitric Acid Organic acids - Oxalic acids, Carbolic acids and Formic acid Alkalies	CK	MK	KH	L&PPT,PER	T- EW,P-VIVA,P-EXAM	F&S	III	
CO2	Describe the action of poison, fatal dose, fatal period, signs and	CK	DK	KH	L&PPT,PE	T- EW,P-VIVA	F&S	III	

	symptoms, management, post mortem appearance and medico legal aspects of Asphyxiants - CO and CO2 Non Metal - Phosphorous Hydrocarbon - Kerosene				R				
CO2	Describe the action of poison, fatal dose, fatal period, signs and symptoms, management, post mortem appearance and medico legal aspects of agrochemical poisons- organophosphorous compounds, carbamates, organochlorine compounds and aluminium phosphide and enlist the household poisons.	CAP	MK	SH	L&PPT,PBL	T- EW,P-VIVA,P-EXAM	F&S	III	
Topic 13 Substances of abuse (Lecture :4 hours, Non lecture: 3 hours)									
CO1,CO2	Define Mada and describe its stages.	CK	MK	K	L&PPT	T-EMI,T-MEQs,P-VIVA	F&S	III	
CO1,CO2	Describe the types of madatyaya along with its management.	CK	MK	K	L&PPT	T-EMI,T-MEQs,P-VIVA	F&S	III	
CO1,CO2,CO6	Describe mode of action, fatal dose, fatal period, signs and symptoms, management, post mortem appearance and medicolegal importance of acute ethanol poisoning.	CC	MK	KH	L&PPT	T-EMI,T-CS,T-OBT,P-VIVA	F&S	III	
CO1,CO2,CO6	Describe mode of action, fatal dose, fatal period, signs and symptoms, management, post mortem appearance and medicolegal importance of acute methanol poisoning.	CC	MK	K	L&PPT	T-EMI,T-MEQs,P-VIVA	F&S	III	
CO2,CO4	Discuss the application of principles of Ayurveda in the	CC	MK	KH	L&G	T- EW,P-	F&S	III	

	management of chronic alcoholism.				D,BS	VIVA			
CO2,CO4	Discuss the signs & symptoms of alcohol withdrawal with its Ayurvedic approach.	CC	MK	KH	L&G D,BS, IBL	T- EW,P-VIVA	F&S	III	
CO2,CO4	Discuss the signs & symptoms of withdrawal of bhang (cannabis), ahiphena/opium and its derivatives, tobacco, LSD and MDMA with its Ayurvedic approach.	CC	MK	KH	L&G D,BS, TUT	T- EW,P-VIVA	F&S	III	
CO2,CO4	Discuss the reseach updates in Ayurveda in the management of conditions due to substances of abuse.	CC	MK	KH	L&G D	T-EMI,T- MEQs,T-CRQs,P-VIVA	F&S	III	
CO7	Describe the NDPS Act.	CK	DK	K	L&PPT	T- EW	F&S	III	
Topic 14 Agada Tantra perspectives on cancer (Lecture :2 hours, Non lecture: 4 hours)									
CO2,CO4	Discuss the concepts of Agada Tantra in oncology.	CC	MK	KH	L&G D,BS, PBL	T-EMI,T-MEQs,P-VIVA	F&S	III	
CO1,CO2	Enlist the cancer causing toxic chemicals / substances (toxic carcinogens) and describe the process of mutation in genes and carcinogenesis.	CC	MK	K	L&G D	T-EMI,T- MEQs,T-CRQs,P-VIVA,SA	F&S	III	
CO2,CO4	Describe the chemotherapy induced common toxicities and Ayurvedic approach for its management.	CC	MK	KH	L&PPT,PBL	T-EMI,T- MEQs,T-CRQs,P-VIVA,SA	F&S	III	
CO2,CO4	Describe the radiotherapy induced common toxicity and Ayurvedic approach for its management.	CC	MK	KH	L&G D,PBL,SDL	T-EMI,T- MEQs,T-CRQs,P-VIVA	F&S	III	

CO2,CO4	Discuss the role of visha and vishaghna dravya in the management of cancer along with its research updates.	CC	DK	KH	L&GD,BS	T-EMI,T- MEQs,T-CRQs,P-VIVA	F&S	III	
Topic 15 Forensic medicine (Vyavahara Ayurveda) and Medical jurisprudence (Vidhi vaidyaka): (Lecture :1 hours, Non lecture: 0 hours)									
CO1,CO6,CO7	Define Forensic Medicine & Medical Jurisprudence. Give an introduction to Indian Penal Code (IPC), Criminal Procedure Code (CrPC) and Indian Evidence Act (IEA).	CC	MK	KH	L&GD	T- EW,P-VIVA,QZ	F&S	I	
Topic 16 Vaidya sadvritta : Duties and Responsibilities of medical practitioner (Lecture :6 hours, Non lecture: 4 hours)									
CO1,CO6,CO7	Describe vaidya sadvritta, medical ethics, code of conduct, Charaka oath and Hippocratic oath.	CK	MK	K	L&PPT,L&GD,BS,PER	T- EW,P-VIVA	F&S	I	
CO1,CO6,CO7	Desribe the constitution, objectives and functions of NCISM.	CK	MK	K	L&PPT,DIS	T- EW,P-VIVA	F&S	I	
CO6,CO7	Describe the duties and rights and privileges of a registered medical practitioner.	CK	MK	K	L&PPT,DIS	T- EW,P-VIVA	F&S	I	
CO1,CO6,CO7	Describe consent, professional secrecy and privileged communication.	CC	MK	K	L&PPT,BS	T- EW	F&S	I	
CO1,CO6,CO7	Describe professional negligence, professional misconduct and unethical practices.	CC	MK	K	L&GD,CBL,PER	T- EW,P-VIVA	F&S	I	
CO6,CO7	Explain the defenses in medical negligence suits with appropriate case laws.	CAP	MK	K	L&PPT,L&GD,B	T- EW,P-VIVA	F&S	I	

					S,CBL				
CO6,CO7	Describe the maintainance of medical records and explain its significance.	CC	MK	K	L,FV	T- EW,P-VIVA	F&S	I	
CO7	Describe the Consumer Protection Act.	CK	MK	K	L&PPT	T- EW,P-VIVA	F&S	I	
Topic 17 Legal Procedures (Lecture :4 hours, Non lecture: 4 hours)									
CO1,CO6,CO7	Describe the types of courts along with their powers. Describe - Inquest, Evidence, Witness, Summons, Conduct money and procedure of recording of evidence in a court of law. Describe the conduct of a medical professional in the court of law.	CC	MK	KH	L&PPT,DIS,SDL	T- EW,P-VIVA,CL-PR	F&S	I	
Topic 18 Personal identity (Lecture :2 hours, Non lecture: 2 hours)									
CO1,CO6	Define identification and enlist the identification data. Describe the method of estimation of age based on Teeth, ossification of bones, secondary sexual characteristics and general development.	CC	DK	KH	L&PPT,L_VC,DIS	T- EW,P-VIVA	F&S	I	
CO1,CO6	Describe the medico-legal importance of age, tattoo marks and occupational marks.	CK	DK	K	L&PPT	T- EW	F&S	I	
CO1,CO6	Describe the medico-legal importance of race, religion, sex, moles and hair.	CC	DK	KH	L_VC,DIS,EDU	P-VIVA	F	I	
CO1,CO6	Describe the medico-legal importance of handwriting, dactylography, DNA typing and superimposition as an identification data.	CK	NK	K	L,EDU	T- EW	F	I	
Topic 19 Thanatology (Lecture :6 hours, Non lecture: 2 hours)									

CO6	Define death and describe the stages and modes of death. Explain the immediate changes following death.	CC	MK	KH	L&PPT,L&GD,L_VC	T- EW,P-VIVA	F&S	II	
CO6	Enlist and explain the early changes following death. Describe Algor mortis, rigor mortis and livor mortis with regards to their definition, mechanism, modifying factors and medico legal importance.	CC	MK	KH	L&PPT,L_VC,DIS,SIM	T- EW,P-VIVA	F&S	II	
CO6	Enlist the late changes following death and describe the definition, modifying factors and medico legal importance of putrefaction, mummification and adipocere formation.	CC	MK	KH	L&PPT,L_VC,DIS	T- EW,P-VIVA	F&S	II	
CO6	Define Autopsy and describe its types, its objectives, rules and procedure along with exhumation.	CC	MK	KH	L&PPT,L_VC	T- EW,P-VIVA	F&S	II	
CO6	Describe the Transplantation of Human Organs and Tissues Act.	CC	NK	KH	BS,SDL,PER	T- EW,P-VIVA	F	II	
Topic 20 Asphyxial deaths (Lecture :4 hours, Non lecture: 2 hours)									
CO6	Define hanging. Describe its classification, causes of death, post-mortem appearances and medico-legal aspects.	CK	MK	KH	L&PPT,DIS	T- EW,T- MEQs,T-CS,P-	F&S	II	

						VIVA,P-MOD			
CO6	Define strangulation and suffocation. Enlist their classification, post-mortem appearances and medico-legal aspects.	CK	MK	K	L&PPT,D-M	T- EW,T- MEQs,PRN,M-MOD	F&S	II	
CO6	Define Drowning, explain its classification, post-mortem appearances and medico-legal aspects.	CK	MK	K	L&PPT,L_VC	T- EW,P-VIVA,PRN,P-CASE	F&S	II	
Topic 21 Injury (Lecture :5 hours, Non lecture: 3 hours)									
CO6	Define and classify Injuries. Describe the medico-legal aspects of injuries.	CK	MK	K	L&GD	T- EW	F&S	II	
CO6	Describe the characteristics, age and medico-legal aspects of mechanical injuries.	CK	MK	K	L&PPT	T- EW	F&S	II	
CO6	Describe firearm injuries, its characteristics and medico-legal aspects. Differentiate between entry and exit wound	CK	DK	K	L&PPT	T- EW	F&S	II	
CO6	Define and classify thermal injury. Describe charecterstics and degrees of burns, rule of nine, post-mortem appearances, and medico-legal aspects.	CK	DK	K	L&GD	T- EW	F&S	II	
CO6	Explain medico-legal aspects of dowry death.	CK	NK	K	L&GD	T- EW	F&S	II	
Topic 22 Pregnancy, delivery and abortion (Lecture :2 hours, Non lecture: 3 hours)									
CO6,CO7	Define pregnancy, delivery, infanticide and battered baby syndrome along with their medico legal aspects.	CK	MK	K	L,L&PPT,L&GD	T- EW,T-CS,P-VIVA,P-EXAM	F&S	III	
CO6,CO7	Define and classify abortion, MTP Act and PCPNDT Act.	CK	MK	K	L&PPT,D-	T- EW,T- MEQs,T-CS,P-	F&S	III	

					M,D	VIVA,PRN			
CO6,CO7	Describe Surrogacy (Regulation) Act 2021 and the Assisted Reproductive Technology (Regulation) Act 2021.	CK	NK	KH	L,L&PPT	P-VIVA,O-QZ	F&S	III	
Topic 23 Sexual offences (Lecture :2 hours, Non lecture: 1 hours)									
CO6	Describe classification of sexual offences.	CK	NK	KH	L&PPT	P-VIVA,PRN,QZ	F&S	III	
CO6	Define rape. Describe the examination of rape victim and accused and its medico legal aspects.	CK	MK	KH	L&PPT,CBL	T- EW,P-VIVA,P-EXAM,PRN	F&S	III	
CO6	Define the un-natural sexual offences and sexual perversion with their medico-legal aspects and give introduction to POCSO Act.	CK	NK	K	L&PPT,CBL	P-VIVA,QZ	F&S	III	
Topic 24 Forensic psychiatry. (Lecture :2 hours, Non lecture: 2 hours)									
CO6	Describe the symptoms commonly associated with psychiatric disorders & the significance of lucid interval.	CK	DK	K	L&PPT,TUT	T-EMI,T-EW,P-VIVA	F&S	III	
CO6,CO7	Describe the civil and criminal responsibilities of a mentally ill person.	CK	DK	K	L&PPT	T- EW,P-VIVA	F&S	III	
CO6	Describe Mental Health Act	CK	NK	K	SDL,PER	T- EW,P-VIVA	F&S	III	
Topic 25 Forensic science laboratory (Lecture :1 hours, Non lecture: 0 hours)									
CO6	25.1. Hierarchy and major divisions of forensic lab services. 25.2. Newer techniques and recent advances - polygraphy,	CK	DK	K	L&PPT,ML	T-OBT,P-VIVA	F&S	III	

	narcoanalysis, DNA profiling.								
Topic 26 Laws, Acts, Rules and Regulations (Lecture :3 hours, Non lecture: 2 hours)									
CO6,CO7	Describe the 1. NCISM Rules and Regulations in force. 2. Clinical Establishments Act. 3. Medicare Service Persons and Medicare Service Institutions (Prevention of violence and damage or loss to property) Act, 2008. 4. The Drug and Cosmetic Act - schedules related to poison. 5. Rules and Regulations related to AYUSH State Registration Boards of concern state.	CK	DK	K	L&PPT,DIS,SDL	T- EW,P-VIVA,CL-PR	F&S	III	

List of Practicals (Term and Hours)

PRACTICALS (Marks-100)			
S.No	**List of Topics**	**Term**	**Hours**
1	Visha Chikitsa	1	6
2	Vishakta Ahara Pariksha	1	6
3	Dooshivisha, Garavisha, Visha Upadrava	1	20
4	Dermatological manifestation of visha	2	20
5	Environmental toxicology	2	2
6	Jangama Visha	2	10
7	Sthavara visha	2	6
8	Substance abuse	3	8
9	Legal Procedures	1	2
10	Vaidya Sadvritta	1	2
11	Personal Identity	1	4
12	Thanatology	2	6
13	Injury	2	6
14	Sexual offences	3	2
15	Field Visits (Field visits should be integrated along with the educational tour conducted by Dravyagunavijnan, Rasasatra and Swasthavrutha Departments)	2	30
16	Topics related to regional preference	3	10

Table 4: Learning objectives (Practical)

A4 Course outcome	B4 Learning Objective (At the end of the session, the students should be able to)	C4 Domain/sub	D4 Must to know / desirable to know / Nice to know	E4 Level Does/ Shows how/ Knows how/ Know	F4 T-L method	G4 Assessment (Refer abbreviations)	H4 Formative/ summative	I4 Term	K4 Integration
Topic 1 Visha Chikitsa									
CO2	Demonstrate the procedure of gastric lavage on mannequin.	CAP	MK	SH	D-M,D	P-EXAM,P-PRF,OSPE	F&S	I	
CO2	Demonstrate the procedure of CPR on mannequin.	PSY-MEC	MK	D	D-M,D	P-EXAM,P-PRF,OSPE	F&S	I	
CO2	Observe the differrent procedures for removal of absorbed poison.	CC	MK	KH	L_VC,D	P-VIVA	F&S	I	
Topic 2 Vishakta Ahara Pariksha									
CO2	Demonstrate adulteration detection test for urea in milk, boric acid in milk, artificial colour in turmeric, pulses and vegetables as per recent Food Safety and Standards Authority of India (FSSAI) guidelines.	PSY-SET	MK	D	D_L	P-PRF,RK	F&S	I	
CO2	Demonstrate adulteration detection test for argemone oil in mustard oil and adulterants in Honey as per recent FSSAI guidelines.	PSY-SET	MK	D	D_L	P-PRF,RK	F&S	I	
Topic 3 Dooshivisha, Garavisha, Visha Upadrava									

CO3,CO4	Diagnosis and management of diseases due to garavisha, dooshivisha and visha upadrava - drug induced toxicities.	CAP	MK	SH	L_VC ,CBL, SIM, CD	SP,OSCE ,RK	F&S	I	
CO3,CO4	Diagnosis and management of diseases due to garavisha, dooshivisha and visha upadrava - occupational hazards.	CAP	MK	KH	L_VC ,PBL, CBL, SIM, CD	OSCE ,RK	F&S	II	
CO3,CO4	Diagnosis and management of diseases due to garavisha, dooshivisha and visha upadrava - allergic manifestations.	CAP	MK	KH	L_VC ,PBL, CBL, SIM, CD	OSCE ,RK	F&S	I	
CO3,CO4	Diagnosis and management of diseases due to garavisha, dooshivisha and visha upadrava - autoimmune diseases	CAP	MK	KH	L_VC ,CBL, CD	OSCE ,RK	F&S	I	
CO3,CO4	Diagnosis and management of diseases due to garavisha, dooshivisha and visha upadrava - endocrine disruptors induced diseases.	CAP	MK	KH	L_VC ,CBL, CD	OSCE ,RK	F&S	I	
Topic 4 Dermatological manifestation of visha									
CO3,CO4	Diagnosis and Management of Dermatological manifestations due to visha ex: contact poisoning (paduka visha, abharana visha etc.)	CAN	MK	SH	L_VC ,CBL, CD	OSCE ,RK	F&S	II	
CO3,CO4	Diagnosis and management of dermatological manifestations due to visha - bites and stings.	CAP	MK	KH	L_VC ,CBL, CD	OSCE ,RK	F&S	II	

CO3,CO4	Diagnosis and Management of contact dermatitis based on the principles of Agada Tantra.	CAP	MK	KH	L_VC ,CBL, CD	OSCE ,RK	F&S	II	
Topic 5 Environmental toxicology									
CO5	Social Awareness program related to environmental toxicology – Rally, street play, skit etc	AFT-VAL	DK	SH	RP	P-VIVA,M-CHT	F	II	
Topic 6 Jangama Visha									
CO2,CO4	Demonstrate identification of poisonous and non poisonous snakes.	CAN	MK	KH	L&G D,L_ VC,D-M,FV	P-VIVA,P-EXAM,OSCE	F&S	II	
CO2,CO4	Demonstration of the diagnosis of poisonous snake bite cases based on local and systemic clinical presentations.	CAP	MK	KH	L&G D,L_ VC,C BL,C D	P-VIVA,P-EXAM,RK	F&S	II	
CO2,CO4	Demonstration of identification of vrishchika, loota and keeta based on regional prevalence and their diagnosis based on clinical presentations.	CAP	MK	KH	L&G D,L_ VC,C BL,C D	P-VIVA,P-EXAM,RK	F&S	II	
Topic 7 Sthavara visha									
CO2	Demonstration of Identification of vatsanabha, karaveera and tobacco with their respective toxic parts.	CAN	MK	KH	D-M,D	P-VIVA,P-EXAM,OSPE ,RK	F&S	II	
CO2	Demonstration of Identification of kupeelu, dhattura and bhanga	CAN	MK	KH	D	P-VIVA,P-	F&S	II	

	and their respective toxic part.					EXAM,OSPE ,RK			
CO2	Demonstration of Identification of jayapala, gunja, bhallataka, langali with their respective toxic parts.	CAN	MK	KH	D	P-VIVA,P-EXAM,OSPE ,RK	F&S	II	
CO2	Demonstration of identification of arsenic, copper, mercury and lead.	CAN	MK	K	D-M	P-VIVA,P-EXAM	F&S	III	
CO2	Demonstration of Identification of non metal and mineral compounds, acids, alkalis, agrochemicals, hydrocarbons and household poisons.	CK	MK	K	D	P-VIVA,P-EXAM,RK	F&S	III	
Topic 8 Substance abuse									
CO2,CO4	Create public awareness on substance abuse and its ill effects.	AFT-VAL	MK	SH	RP,D	P-POS,QZ ,M-CHT	F	III	
Topic 9 Legal Procedures									
CO6,CO7	Demonstartion on issuing of fitness certificate, sickness certificate, birth and death certificate, and other relevant medical and medico legal certificates.	CAN	MK	D	PBL, W,PT	P-EXAM,OSPE ,RK	F&S	I	
CO6,CO7	Demonstartion of reporting of Leave against medical advice (LAMA), discharge against medical advice (DAMA) and doscharge on patient request (DOPR)	CAP	MK	D	SDL	P-VIVA,RK	F	I	
Topic 10 Vaidya Sadvritta									
CO6,CO7	Exposure to medical records department for understanding storage, maintanance and disposal of Medical records.	CK	DK	K	D,FV	P-VIVA	F&S	I	
Topic 11 Personal Identity									

CO6	Demonstrate the method of sex determination based on pelvis.	CAP	MK	SH	EDU, SIM, D	P-PRF,OSPE	F&S	I	
Topic 12 Thanatology									
CO6	Observe the procedure of medico-legal autopsy and preparation autopsy report.	CAP	MK	SH	L_VC ,D,FV	RK	S	II	
Topic 13 Injury									
CO6,CO7	Demonstrate the difference between homicidal, suicidal and accidental injuries.	CAP	MK	SH	L&PP T,L_ VC,SI M,D-M	P-VIVA,P-EXAM	F&S	II	
CO6,CO7	Demonstration of drafting of an injury report.	CAP	MK	D	D-M,D	P-EXAM,P-PRF	F&S	II	
Topic 14 Sexual offences									
CO5,CO6,CO7	Discuss the essentials of Protection of Women from Domestic Violence Act (PWDV Act) 2005 and The Sexual Harassment of Women at Workplace (Prevention, Prohibition & Redressal) Act and Rules (PoSH Act) 2013.	AFT-VAL	DK	D	L&G D,BS, RP	C-INT,INT	F&S	III	
Topic 15 Field Visits (Field visits should be integrated along with the educational tour conducted by Dravyagunavijnan, Rasasatra and Swasthavrutha Departments)									
CO6,CO7	(Visit to Forensic Science Laboratory) - (Mandatory) Appraise the functioning of a forensic science laboratory	CC	MK	KH	FV	P-VIVA,RK	F	III	
CO4,CO5	(Visit to Food testing laboratory) Observe the instrumentation and procedire of food testing	CC	DK	KH	FV	RK,COM	F	I	

CO4,CO5	(Visit to Pollution Control Board) - (Mandatory) Perceive the functioning of Pollution Control Board	CC	DK	KH	FV	P-VIVA,RK	F	II	
CO4,CO5	(Visit to De-addiction centre)Observe the management of de-addiction cases	PSY-GUD	DK	KH	FV	RK	F	III	
CO7	(Visit to the Court) - (Mandatory) Observe the procedure of court procedure and conduct of a medical practitioner as an expert witness	PSY-GUD	MK	KH	FV	RK	F	I	
CO6	(Visit to mortuary for observation of autopsy)Observe the procedure of medico-legal autopsy	PSY-GUD	MK	KH	FV	P-VIVA,RK	F	II	
CO2	(Visit to snake park) - (Mandatory)Observe live specimens of snake	CC	DK	KH	FV	P-VIVA,RK	F	II	
CO2,CO7	(Visit to casuality) -(Mandatory) Watch the procedure of resuscitation and emergency management	CK	MK	KH	FV	RK	F	I	
CO4,CO5	(Visit to occupational hazards centre)Observe the types and management of cases of occupational hazard	CK	DK	KH	FV	RK	F	II	
CO2	(Visit to ASV manufacturing centre)Observe the steps and procedures involved in ASV manufacturing	CK	DK	K	FV	RK	F	II	
CO4,CO5	Visit Cancer treatment centre.	CK	NK	K	FV	RK	F	III	
CO2,CO4	Visit to department of entomology.	CC	NK	K	FV	RK	F	II	
CO2,CO5	Visit to folklore vaidya using Agada tantra concepts in visha chikitsa.	CAP	DK	SH	FV	RK	F&S	II	
Topic 16 Topics related to regional preference									
CO2,CO3	Discuss the topics related to regional preference like bites and stings, substance abuse, texts of regional importance, regional	CAP	NK	K	L&GD	P-VIVA,M-POS	F	III	

			visha chikitsa practices, regional medico-legal issues etc.										

Table 4a: List of Practical

S.No	Name of practical	Term	Activity	Practical hrs
1	Visha Chikitsa	1	1.1 Gastric lavage 1.2 Cardiopulnomary resuscitation (CPR) 1.3 Video demonstration or visit to the emergency care unit for procedures used for removal of absorbed poison.	6
2	Vishakta Ahara Pariksha	1	2.1 Adulteration detection Tests 2.1.1 Urea in milk 2.1.2 Boric acid in milk 2.1.3 Artificial color in turmeric. 2.1.4 Artificial color in pulses and Vegetables. 2.1.5 Argemone Oil in Mustard oil 2.1.6 Adulteration in Honey	6
3	Dooshivisha, Garavisha, Visha Upadrava	1	3.1 Case based teaching on diseases due to dooshivisha and garavisha - drug induced toxicity, occupational hazards, allergic manifestations, autoimmune diseases and endocrine disruptors. 3.2 Recording 10 cases based on case based teaching or OPD and IPD exposure.	20
4	Dermatological manifestation of visha	2	4.1 Dermatological manifestations due to visha ex: contact poisoning (paduka visha, abharana visha etc.) and bites and stings. 4.2 Contact Dermatitis 4.3 Recording 10 cases based on case based teaching or OPD and IPD Exposure.	20
5	Environmental toxicology	2	5.1 Social Awareness program – Rally, street play, skit etc.	2
6	JangamaVisha	2	6.1 Identification of Poisonous and non poisonous snakes 6.2 Diagnosis based on bite marks of snakes 6.3 Diagnosis and Management of snake bite cases through audio/video case presentations or OPD/IPD exposure 6.4 Diagnosis and management of vrishchika, loota and keeta damsha cases through audio/video case presentations or	10

			OPD/IPD exposure.	
7	Sthavara visha	2	7.1 Identification of various plant poisons, metal and mineral compounds, acids, alkalis, agrochemicals, hydrocarbons and household poisons.	6
8	Substance abuse	3	8.1 Community Awareness programmes by students like rallies, street play etc. 8.1.1. Observation of international day against drug abuse and illicit trafficking. 8.1.2. World No tobacco day.	8
9	Legal Procedures	1	9.1 Hands on training on Preparation of Medical & Medico legal reports. 9.1.1 Fitness & Sickness certificate. 9.1.2 Birth & Death Certificate and other relevant medical and medico legal certificates. 9.1.3 Leaving against medical advice (LAMA), Discharge against medical advice (DAMA), Discharge on patient request (DOPR)	2
10	Vaidya Sadvritta	1	10.1 Exposure to the medical records department for understanding the storage, maintenance and disposal of medical records.	2
11	Personal Identity	1	11.1. Sex determination based on pelvis.	4
12	Thanatology	2	12.1 Procedure of autopsy: visit to mortuary or audio-visual demonstrations.	6
13	Injury	2	13.1. Hands on training on assessment of accidental, suicidal, and homicidal injuries. 13.2. Preparation of injury report.	6
14	Sexual offences	3	14.1 Introduction to Protection of Women from Domestic Violence Act (PWDV Act) 2005 and The Sexual Harassment of	2

			Women at Workplace (Prevention, Prohibition & Redressal) Act and Rules (PoSH Act) 2013.	
15	Field Visits (Field visits should be integrated along with the educational tour conducted by Dravyagunavijnan, Rasasatra and Swasthavrutha Departments)	2	(It is mandatory to have 5 field visits)	30
16	Topics related to regional preference	3	Exposure to topics related to regional preference like bites and stings, substance abuse, texts of regional importance, regional visha chikitsa practices, regional medico-legal issues etc.	10
			Total Hr	**140**

Activity

CO	Topic name	Activity Details	Hours#
CO3,CO4	Survey of personal care products.	Students shall be divided into small groups and are asked to collect the information about common personal care products like soaps, shampoos, deodorants, cosmetics etc. Then they sholud be asked to enlist the chemicals used in them and discuss about the health hazards associated with their use. Then students can be asked to present their findings in the form of class seminar or Charts or Posters or small videos.	4
CO5	Community teaching by students - awareness among adoloscent about Protection of Women from Domestic Violence Act (PWDV Act) 2005 and The Sexual Harassment of Women at Workplace (Prevention, Prohibition & Redressal) Act and Rules	After undergoing orientation/sensitization regarding Protection of Women from Domestic Violence Act (PWDV Act) 2005 and The Sexual Harassment of Women at Workplace (Prevention, Prohibition & Redressal) Act and Rules (PoSH Act) 2013, the students will have to visit nearby schools/colleges in small teams/groups and create awareness amongst them. This can be done as part of NSS activity or exclusive visits to schools/colleges.	2

	(PoSH Act) 2013.		
CO2,CO4	Observation of international day against drug abuse and illicit trafficking	Community awareness programmes by students like rallies, street play etc.	3
CO2,CO4	No Tobacco Day	Community Awareness programmes by students like rallies, street play, skit, flash mob etc.	3
CO5	Environmental toxicology	Poster presentation competition related to environment, rallies, skit, flash mob on World Environment Day.	2
CO6,CO7	Vaidya sadvritta	Exposure to Medical records department for maintainance, storage and disposal of medical record, finding out errors in medical case reccords.	2
CO6	Forensic psychiatry	Seminar/ guest lecture on how to deal with adolescent psychiatric issue	2
CO2,CO4	Chronic toxicity of heavy metals.	Group discusion and case based learning by taking example of published case reports.	1
CO2,CO4	World Cancer Day to raise awareness of cancer risk and cancer prevention	Poster Competition / Quiz Competition / Gruop Discusion	4
CO6,CO7	Legal procedure-Recording of evidence and duties of a physician in the court of Law.	Mock court / role play	4
CO2	Sarpa Visha	1. Identification of poisonous and non poisononus snakes - Group Discussion/ Brainstorming - Specimens (Photos) of poisonous and non poisonous snakes with their features shall be given to small group of students and asked to identify the sankes. 2. Clinical diagnosis of snake bites	2

		Group Discussion - Specimens (Photos) showcasing local and systemic signs and symptoms of poisonous (Hemotoxic and Nuerotoxic) snake bite shall be given to small group of students and asked to diagnose the case. CBL - Presentation of recorded cases or the Case reports or studies published in reputed journals. Brainstorming/Quiz - The same pictures may be shown with MCQ's and Quiz session can be conducted among the groups of students	
CO2	Vrischika visha, luta visha and keeta visha.	Group Discussion - Specimens (Photos) showcasing local and systemic signs and symptoms of Vrischika Visha (Scorpion Sting), Loota Visha (Spider Bite) and Keetavisha (Insect bite) and differentiating with snake bites shall be given to small group of students and asked to diagnose the case. CBL - Presentation of recorded cases or the Case reports or studies published in reputed journals. Brainstorming/Quiz - The same pictures may be shown with MCQ's and Quiz session can be conducted among the groups of students.	2
CO3,CO4	Dooshivisha, garavisha and visha upadrava	Group Discussion - Photographs/case reports/ simulated cases showcasing various drug induced toxicities, occupational hazards, allergic manifestations, autoimmune diseases and diseases due to endocrine disruptors shall be given to small group of students and asked to assess the dosha, diagnose and discuss the plan of treatment.	4

		CBL - Presentation of recorded cases or the Case reports or studies published in reputed journals. Brainstorming/Quiz - The same pictures may be shown with MCQ's and Quiz session can be conducted among the groups of students.	
CO3,CO4	Dermatological manifestation of visha.	Group Discussion - Photographs/case reports/ simulated cases showcasing various dermatological presentations of poison, bites and stings and contact dermititis shall be given to small group of students and asked to assess the dosha, diagnose and discuss the plan of treatment. CBL - Presentation of recorded cases or the Case reports or studies published in reputed journals. Brainstorming/Quiz - The same pictures may be shown with MCQ's and Quiz session can be conducted among the groups of students.	4

Hours indicated are included in calculations of Table 3 and 4

Table 5- Teaching learning method

Sr No	Teaching learning methods in the course	No of Activities
1	Lecture	18
2	Lecture with Power point presentation	106
3	Lecture & Group Discussion	32
4	Lecture with Video clips	13
5	Discussions	22
6	Brainstorming	22
7	Inquiry-Based Learning	1

8	PBL	6
9	CBL	26
10	Flipped classroom	4
11	Edutainment	2
12	Mobile learning	2
13	Simulation	1
14	Self-directed learning	15
15	Demo on Model	2
16	Tutorial	2
17	Presentations	9
18	Practical	1
19	Case diagnosis	5
20	Demonstration	2
21	Field visit	1

These are overall teaching learning methods listed in Table 3 and 4. Teachers can select the best possible method amongst the given methods as per objective, available time etc.

Table 6: Assessment Summary: Assessment is subdivided in A to H points

6 A-Number of Papers and Marks Distribution

Subject Code	Papers	Theory	Practical/Clinical Assessment					
			Practical	Viva	Elective (Set SA)	IA	Sub Total	Grand Total
AyUG-AT	1	100	100	60	10	30	200	300

6 B - Scheme of Assessment (formative and Summative)

PROFESSIONAL COURSE	DURATION OF PROFESSIONAL COURSE		
	First Term (1-6 Months)	Second Term (7-12 Months)	Third Term (13-18 Months)
Second	3 PA & First TT	3 PA & Second TT	3 PA & UE**

PA: Periodical Assessment; **TT:** Term Test; **UE:** University Examinations.

** University Examination shall be on entire syllabus

6 C - Calculation Method for Internal assessment Marks

TERM	PERIODICAL ASSESSMENT*					TERM TEST**	TERM ASSESSMENT	
	A 4	B	C	D	E	F	G	H
	1 (15 Marks)	2 (15 Marks)	3 (15 Marks)	Average (A+B+C/ 3)	Converted to 30 Marks (D/15*30)	Term Test (Marks converted to 30)	Sub Total _/60 Marks	Term Ass essment (…./30)
FIRST							E+F	(E+F)/2
SECOND							E+F	(E+F)/2
THIRD						NIL		E
Final IA	Average of Three Term Assessment Marks as Shown in 'H' Column.							
	Maximum Marks in Parentheses *Select an Evaluation Method which is appropriate for the objectives of Topics from the Table 6 D for Periodic assessment. Conduct 15 marks assessment and enter marks in A, B, and C. ** Conduct Theory (100 Marks)(MCQ(20*1 Marks), SAQ(8*5), LAQ(4*10)) and Practical (100 Marks) Then convert to 30 marks.							

6 D - Evaluation Methods for Periodical Assessment

S. No	Evaluation Methods
1	Activities Indicated in Table 3 - Column G3 as per Indicated I, II or III term in column I3

Evaluation Methods in MSE

1. Practical / Clinical Performance
2. Viva Voce, MCQs, MEQ (Modified Essay Questions/Structured Questions)
3. Open Book Test (Problem Based)
4. Summary Writing (Research Papers/ Samhitas)
5. Class Presentations; Work Book Maintenance
6. Problem Based Assignment
7. Objective Structured Clinical Examination (OSCE), Objective Structured Practical Examination (OPSE), Mini Clinical Evaluation Exercise (Mini-CEX), Direct Observation of Procedures (DOP), Case Based Discussion (CBD)
8. Extra-curricular Activities, (Social Work, Public Awareness, Surveillance Activities, Sports or Other Activities which may be decided by the department).
9. Small Project etc.

6 E Question Paper Pattern

II PROFESSIONAL BAMS EXAMINATIONS
AyUG-AT
PAPER-1
Time: 3 Hours Maximum Marks: 100
INSTRUCTIONS: All questions compulsory

		Number of Questions	**Marks per question**	**Total Marks**
Q 1	MULTIPLE CHOICE QUESTIONS (MCQ)	20	1	20
Q 2	SHORT ANSWER QUESTIONS (SAQ)	8	5	40
Q 3	LONG ANSWER QUESTIONS (LAQ)	4	10	40
				100

6 F Distribution of theory examination

Paper 1						
Sr. No	**A List of Topics**	**B Term**	**C Marks**	**MCQ (1 Mark)**	**SAQ (5 Marks)**	**LAQ (10 Marks)**
1	**Concepts of Agada Tantra (Clinical Toxicology)**	1	13	Yes	Yes	Yes
2	**Visha Chikitsa (Management of Poisoning)**	1		Yes	Yes	Yes
3	**Vishakta aahara pariksha and Viruddha ahara**	1		Yes	Yes	No
4	**Garavisha and Dooshivisha**	1	12	Yes	Yes	Yes
5	**Visha Upadrava and diseases caused due to exposure to Visha/poisons**	1		Yes	Yes	No
6	**Environmental Toxicology**	2	11	Yes	Yes	No
7	**Dermatological manifestations of visha/poisons.**	2		Yes	Yes	No
8	**Therapeutic utility of Agada yoga**	2		Yes	Yes	No
9	**Sthavara visha – Poisons of Plant origin**	2	17	Yes	Yes	Yes
10	**Sthavara Visha – Poisons of Metallic origin**	2		Yes	Yes	Yes
11	**Jangama Visha**	2		Yes	Yes	Yes
12	**Kritrima visha**	3	12	Yes	Yes	Yes
13	**Substances of abuse**	3		Yes	Yes	Yes
14	**Agada Tantra perspectives on cancer**	3		Yes	Yes	No
15	**Forensic medicine (Vyavahara Ayurveda) and Medical jurisprudence (Vidhi vaidyaka):**	1	10	Yes	No	No

16	**Vaidya sadvritta : Duties and Responsibilities of medical practitioner**	1		Yes	Yes	No
17	**Legal Procedures**	1		Yes	Yes	No
18	**Personal identity**	1		Yes	Yes	Yes
19	**Thanatology**	2	12	Yes	Yes	Yes
20	**Asphyxial deaths**	2		Yes	Yes	Yes
21	**Injury**	2		Yes	Yes	Yes
22	**Pregnancy, delivery and abortion**	3	6	Yes	Yes	No
23	**Sexual offences**	3		Yes	Yes	No
24	**Forensic psychiatry.**	3	7	Yes	Yes	No
25	**Forensic science laboratory**	3		Yes	Yes	No
26	**Laws, Acts, Rules and Regulations**	3		Yes	Yes	No
Total Marks			**100**			

6 G Blue print of paper I

Paper No:1		
Question No	**Type of Question**	**Question Paper Format**
Q1	**Multiple choice Questions** **20 Questions** **1 mark each** **All compulsory** **Must know part - 15 MCQ** **Desirable to know - 3 MCQ** **Nice to know part - 2 MCQ**	**1.** Concepts of Agada Tantra (Clinical Toxicology) **2.** Visha Chikitsa (Management of Poisoning) **3.** Vishakta aahara pariksha and Viruddha ahara **4.** Garavisha and Dooshivisha **5.** Visha Upadrava and diseases caused due to exposure to Visha/poisons **6.** Asphyxial deaths **7.** Dermatological manifestations of visha/poisons. **8.** Therapeutic utility of Agada yoga **9.** Kritrima visha / Sthavara Visha – Poisons of Metallic origin **10.** Jangama Visha **11.** Substances of abuse **12.** Agada Tantra perspectives on cancer **13.** Vaidya sadvritta : Duties and Responsibilities of medical practitioner / Forensic medicine (Vyavahara Ayurveda) and Medical jurisprudence (Vidhi vaidyaka): **14.** Legal Procedures / Injury **15.** Pregnancy, delivery and abortion / Thanatology **16.** Environmental Toxicology / Personal identity **17.** Forensic psychiatry. / Forensic science laboratory **18.** Laws, Acts, Rules and Regulations **19.** Sthavara visha – Poisons of Plant origin **20.** Sexual offences
Q2	**Short answer Questions** **Eight Questions** **5 Marks Each** **All compulsory** **Must know - 7 SAQ** **Desirable to know - 1 SAQ** **No questions on Nice to know**	**1.** Vishakta aahara pariksha and Viruddha ahara / Visha Upadrava and diseases caused due to exposure to Visha/poisons / Garavisha and Dooshivisha **2.** Visha Chikitsa (Management of Poisoning) / Therapeutic utility of Agada yoga / Dermatological manifestations of visha/poisons. **3.** Kritrima visha / Sthavara visha – Poisons of Plant origin / Environmental Toxicology / Sthavara Visha – Poisons of Metallic origin **4.** Jangama Visha / Concepts of Agada Tantra (Clinical Toxicology) / Vaidya sadvritta : Duties and Responsibilities of medical

		practitioner **5.** Environmental Toxicology / Agada Tantra perspectives on cancer / Substances of abuse **6.** Asphyxial deaths / Personal identity / Injury **7.** Pregnancy, delivery and abortion / Sexual offences / Personal identity **8.** Forensic psychiatry. / Forensic science laboratory / Laws, Acts, Rules and Regulations
Q3	**Long answer Questions** **Four Questions** **10 marks each** **All compulsory** **All questions on must know. No Questions on Nice to know and Desirable to know**	**1.** Visha Chikitsa (Management of Poisoning) / Concepts of Agada Tantra (Clinical Toxicology) **2.** Jangama Visha / Garavisha and Dooshivisha **3.** Kritrima visha / Sthavara visha – Poisons of Plant origin / Sthavara Visha – Poisons of Metallic origin / Substances of abuse **4.** Thanatology / Asphyxial deaths / Personal identity / Injury

6 H Distribution of Practical Exam

S.No	Heads	Marks
1	Spotting (15 specimens of 4 marks each) 1.1. Snake – 2 specimens 1.1.1 Identification - 1 mark 1.1.2 Differentiating features of poisonous/ non-poisonous snake – 1 mark 1.1.3 Important clinical signs - 1 mark 1.1.4 Ayurvedic management - 1 mark1.2. Mineral poisons/ Kritrima visha (1 specimen each)-2 specimens 1.2.1. Identification - 1 mark 1.2.2 Identification of symptom clusters mimicking other diseases and their differential diagnosis - 2 marks 1.2.3 Method of detoxification and Antidotes - 1 mark1.3. Toxic plants– 2 specimens 1.3.1 Identification with scientific, family and sanskrit names 1 mark 1.3.2 Mode of use in Visha cases – 1 mark 1.3.3 detoxification method, Class of poison and Active principles present in the plant - 1 mark 1.3.4 Antidotes used against the specimen - 1 mark1.4. Antitoxic plants – 3 specimens 1.4.1 Identification with scientific, family and sankrit names - 1 mark 1.4.2 Mode of use in visha - 1 mark 1.4.3 Active principles - 1 mark 1.4.4 Important formulations - 1 mark1.5. Injuries – 2 specimens 1.5.1. Identify the injury - 1 mark 1.5.2. Identify the weapon/criminal act causing such injury - 2 mark 1.5.3. Medico-legal importance - 1 marks1.6. News item – paper cuttings or other medico-legal case scenarios – 2 specimens 1.6.1. Identify the crime – 1 mark	60

	1.6.2. Relevant IPC/CrPC sections associated with the crime – 1 mark 1.6.3. Relevant Act related to the crime – with sub-questions related to its sub- sections, punishment etc. - 2 marks7. Jangama visha – other poisonous creatures – 2 specimens 1.7.1. Identification – 1 mark 1.7.2. Adhishtana/samanya lakshana/ chikitsa – 2 marks 1.7.3. specific formulations/doses – 1 mark(Sub-questions mentioned against each item is for a purpose of example only. Different questions may be framed on the various aspects of the guidelines provided)	
2	Practical Records	10
3	Medical and Medico-legal Certificate WritingStudents will be provided with a case-scenario based on which they are asked to write a medical certificate for a specific purpose. Evaluation guidelines should be based on the essential criteria in the format of a valid medical certificate.	10
4	Short CaseCase scenarios with pictures to diagnose a specific case of poisoning and specific questions asked regarding its clinical examination, investigations, treatment, prognosis etc.	10
5	Clinical Applications of Agada • Identification of Agada for a case scenario detailed – 2 marks • Select the ingredients of the formulation from a group of drugs and identify using scientific names and answer sub-questions based on its preparation, anupana, dose etc. – 8 marks	10
6	Viva Questions will be asked on the following topics • Agada Tantra (2 questions 5 marks each) - 10 marks • Forensic Science (Vyavaharayurveda) (2 questions 5 marks) - 10 marks • Jurisprudence (Vidhivaidyaka) (2 questions 5 marks) - 10 marks • Toxicology (2 questions 5 marks each) - 10 marks • Concepts of Agada Tantra in cancer and substance abuse (one question from each) (2 questions 5 marks each) - 10 marks • Viva on Compilation and Communication skills (2 questions 5 marks each) - 10 marks	60

7	Electives (Set SA)	10
8	IA	30
Total Marks		**200**

References Books/ Resources

S.No	Book	Author(s)/Resources
1	Concise Forensic Medicine & Toxicology	**KS Narayana Reddy, Jaypee Medical Publisher**
2	Essentials ofForensic Medicine & Toxicology	**K S Narayana Reddy, Jaypee Medical Publisher**
3	Principles of Forensic Medicine & Toxicology	**Rajesh Bardale, Jaypee Medical Publisher**
4	Modern Medical Toxicology	VV Pillay, Jaypee Medical Publisher
5	Recent Advances in Forensic Medicine and Toxicology (Volume 1 & 2)	Gautam Biswas, Jaypee Medical Publisher
6	Textbook on Medicolegal Issues: Related to Various Medical Specialties by Satish TiwariMahesh BaldwaMukul TiwariAlka Kuthe	Jaypee Medical Publisher
7	Manual on Doctor and Law	RN Goel Narendra, Malhotra Shashi Goel, Jaypee Medical Publisher
8	Jaypee's Video Atlas of Medicolegal Autopsy	Sujith Sreenivas C Prasannan K Thomas Mathew, Jaypee Medical Publisher
9	Jaypee Gold Standard Mini Atlas Series Forensic Medicine by Ashesh Gunwantrao Wankhede	Jaypee Medical Publisher
10	MODI's Textbook of Medical Jurisprudence and Toxicology	K Kannan, Jaypee Medical Publisher
11	A Text book of Agada Tantra	Dr Shobha Bhat, Chaukamba Orientalia
12	Agada Tantra	Dr Ramesh Chandra Tiwari, Chaukamba Orientalia
13	Text Book of Agad Tantra Evam Vyavaharayurveda	Dr Sandeep Charak Dr.Piyush Gupta Dr Divya Tiwari, Ayurveda Sanskrit Hindi Pustak Bhandar.
14	Ayodhyaprasad Achal'sAgada Tantra	Dr Jina Patnaik, Chaukamba Surbharati Prakashan
15	Illustrated Agada Tantra	Dr PVNR Prasad, Chaukamba Sanskrit Series Varanasi
16	Textbook on Agada Tantra	DR V P JOGLEKAR, RASHTRIYA SHIKSHAN MANDAL, PUNE
17	Review of Forensic Medicine and Toxicology by Dr Gautam Biswas	Jaypee Medical Publisher
18	Toxicology - An Ayurvedic Perspective	Department of Agadtantra, Vaidyaratnam PS Varier Ayurveda College, Kottakkal

Abbreviations

Assessment

S.No	Short form	Discription
1	T-EMI	Theory extended matching item
2	T- EW	Theory Essay writing
3	T- MEQs	Theory MEQs
4	T-CRQs	Theory CRQs
5	T-CS	Theory case study
6	T-OBT	Theory open book test
7	P-VIVA	Practical Viva
8	P-REC	Practical Recitation
9	P-EXAM	Practical exam
10	PRN	Presentation
11	P-PRF	Practical Performance
12	P-SUR	Practical Survey
13	P-EN	Practical enact
14	P-RP	Practical Role play
15	P-MOD	Practical Model
16	P-POS	Practical Poster
17	P-CASE	Practical Case taking
18	P-ID	Practical identification
19	P-PS	Practical Problem solving
20	QZ	Quiz
21	PUZ	Puzzles
22	CL-PR	Class Presentation,
23	DEB	Debate
24	WP	Word puzzle
25	O-QZ	Online quiz

26	O-GAME	Online game-based assessment
27	M-MOD	Making of Model
28	M-CHT	Making of Charts
29	M-POS	Making of Posters
30	C-INT	Conducting interview
31	INT	Interactions
32	CR-RED	Critical reading papers
33	CR-W	Creativity Writing
34	C-VC	Clinical video cases,
35	SP	Simulated patients
36	PM	Patient management problems
37	CHK	Checklists
38	OSCE	OSCE
39	OSPE	OSPE,
40	Mini-CEX	Mini-CEX
41	DOPS	DOPS
42	CWS	CWS
43	RS	Rating scales
44	RK	Record keeping
45	COM	Compilations
46	Portfolios	Portfolios
47	Log book	Log book
48	TR	Trainers report
49	SA	Self-assessment
50	PA	Peer assessment
51	360D	360-degree evaluation
52	TT-Theory	Theory
53	PP-Practical	Practical
54	VV-Viva	Viva

Domain

S.No	Short form	Discription
1	CK	Cognitive/Knowledge
2	CC	Cognitive/Comprehension
3	CAP	Cognitive/Application
4	CAN	Cognitive/Analysis
5	CS	Cognitive/Synthesis
6	CE	Cognitive/Evaluation
7	PSY-SET	Psychomotor/Set
8	PSY-GUD	Psychomotor/Guided response
9	PSY-MEC	Psychomotor/Mechanism
10	PSY-ADT	Psychomotor Adaptation
11	PSY-ORG	Psychomotor/Origination
12	AFT-REC	Affective/ Receiving
13	AFT-RES	Affective/Responding
14	AFT-VAL	Affective/Valuing
15	AFT-SET	Affective/Organization
16	AFT-CHR	Affective/ characterization

T L method

S.No	Short form	Discription
1	L	Lecture
2	L&PPT	Lecture with Power point presentation
3	L&GD	Lecture & Group Discussion
4	L_VC	Lecture with Video clips
5	DIS	Discussions
6	BS	Brainstorming
7	IBL	Inquiry-Based Learning
8	PBL	PBL
9	CBL	CBL
10	PrBL	Project-Based Learning
11	TBL	TBL
12	TPW	Team project work
13	FC	Flipped classroom
14	BL	Blended Learning
15	EDU	Edutainment
16	ML	Mobile learning
17	ECE	ECE
18	SIM	Simulation
19	RP	Role plays
20	SDL	Self-directed learning
21	PSM	Problem solving method
22	KL	Kinesthetic Learning
23	W	Workshops
24	GBL	Game-Based Learning
25	D-M	Demo on Model

26	LS	Library Session
27	PL	Peer learning
28	RLE	Real life experience
29	REC	Recitation
30	SY	Symposium
31	TUT	Tutorial
32	PER	Presentations
33	PT	Practical
34	XRay	X ray identification
35	CD	Case diagnosis
36	LRI	Lab report interpretation
37	DA	Drug analysis
38	D	Demonstration
39	D_BED	Demonstration bedside
40	D_L	Demonstration Lab
41	DG	Demonstration Garden
42	FV	Field visit
43	PRA	Practical

(Name of the College)

(Approved by –National Commission for Indian System of Medicines, New Delhi &

Name of the University)

Name of the department

Batch- _____

Certificate

This is to certify that, Mr. / Ms. _____, Enrollment Number- _____ has satisfactorily completed the course of Practicals in (Subject Name) prescribed by the (Name of University) as a part of the Second Professional B.A.M.S. Course.

Examination Seat No.: _____

Date of Examination- _____

Sign. Of Internal Examiner-_____

Sign. Of External Examiner-_____

Sign. of Teacher

Sign. of H.O.D.

Index

Sl.No	PARTICULARS	Page Number

CHARAKA'S SHAPATH

- "During the period of study, I shall live a disciplined life with my teachers and peers. My action shall be guarded, service oriented and free from indiscipline and envy. In my dealings I shall be patient, obedient, humble, constantly contemplative and calm. I shall aim my full efforts and ability towards the desired goal of my profession.
- As a Physician, I shall always use my knowledge for welfare of mankind.
- I shall always be ready to serve patients, even if I am extremely busy and tired. I shall not harm any patient for the sake of monetary or selfish gains, nor shall I entertain a desire for lust, greed or wealth. immorality shall not emerge even in my thoughts.
- My dressing shall be decent yet impressive and inspiring confidence. My conduct shall always be appropriate, pleasant, truthful, beneficial and polite. I shall use my experience in actions appropriate for that time and place.
- I shall constantly endeavour to accomplish/ keep updated with the latest developments in the field and widen my knowledge.
- I shall treat patient of gender other than mine in presence of relatives or attendants.
- When examining a patient, my discretion, attention and senses shall be concentrated on the cure of the disease. I shall not divulge the confidentiality related to the patient or family inappropriately.
- Although an authority (in my subject), I shall not display my knowledge and skill with arrogance.

Declaration of Geneva

The Declaration of Geneva is a statement that was adopted by the World Medical Association (WMA) in 1948 as a modern-day revision of the Hippocratic Oath. It serves as an ethical guide for physicians worldwide. The text of the Declaration of Geneva is as follows:

- "I solemnly pledge to dedicate my life to the service of humanity.
- The health and well-being of my patient will be my first consideration.
- I will respect the autonomy and dignity of my patient.
- I will maintain the utmost respect for human life.
- I will not permit considerations of age, disease or disability, creed, ethnic origin, gender, nationality, political affiliation, race, sexual orientation, social standing or any other factor to intervene between my duty and my patient.
- I will respect the secrets that are confided in me, even after the patient has died.
- I will practice my profession with conscience and dignity and in accordance with good medical practice.
- I will foster the honour and noble traditions of the medical profession.
- I will give to my teachers, colleagues, and students the respect and gratitude that is their due.
- I will share my medical knowledge for the benefit of the patient and the advancement of healthcare.
- I will attend to my own health, well-being, and abilities in order to provide care of the highest standard.
- I make these promises solemnly, freely, and upon my honour."

The Declaration of Geneva emphasizes the physician's commitment to their patients' well-being, the importance of respecting patient autonomy, and the need to uphold the highest ethical standards in medical practice. It serves as a guiding principle for physicians worldwide and reaffirms their dedication to the ethical practice of medicine.

जङ्गम विष (ANIMAL POISON)

1. Sl No.: Date:

2. Name of Animal: Scientific Name:
   Sanskrit: Family:
   English: Type of Poison:

3. Identification Features with Diagram or Picture

4. Fatal Dose: 5. Fatal Period

6. Signs & Symptoms:
Local:

Systemic:

7. Treatment:

Signature of Student **Signature of Staff**

स्थावर विष (VEGETABLE POISONS)

1. Sl No.: Date:

2. Name of Poison: Botanical Name:
Sanskrit: Family:
English: Type of Poison:
Antidote:

3. Description:

4. Chemical Composition:

6. Fatal Dose: 7. Fatal Period:

8. Formulations:

9. Signs and Symptoms:

10. Treatment:

11. Post-mortem Appearances:

2. Medico-Legal Importance:

Signature of Student Signature of Staff

Diagram/Picture

खनिज विष (MINERAL POISON)

1. Sl No.: Date :

2. Name of Poison: Chemical Name :
   Sanskrit : Type of Poison :
   English : Antidote :

3. Chemical Composition & Mode of action:

4. Fatal Dose: 5. Fatal Period :

6. Formulations:

7. Acute Toxic Signs & Symptoms:

8. Chronic Toxicity :

9. Treatment:

13. Post-mortem Appearances:

14. Medico-Legal Importance:

Signature of Student Signature of Staff

Practical Demonstration

Name of the Practical: Gastric Lavage/RT Insertion Date:

Aim:

Requirements:

Precautions:

Preparation:

Procedure:

Contraindications:

Signature of the Student **Signature of the Staff**

Practical Demonstration

Name of the Practical: CPR **Date:**

Aim:

Requirements:

Precautions:

Preparation:

Procedure:

Observation:

Signature of the Student **Signature of the Staff**

Adulteration Tests

Name of the Practical: **Date:**

Aim:

Principle:

Requirements:

Precautions:

Procedure:

Observation:

Inference:

Signature of the Student **Signature of the Staff**

Name of Agada:

Reference and Shloka: -

Ingredients: -

Indications:

Clinical Applications:

Signature of the Student: **Signature of the Staff:**

Case Record Form: General Format

Date of case taking: Case no:

UHID No/ OPD No:..... IP No/ Dt.....

Name: Age: Sex:

Address with phone no: Occupation: Income:

Marital status: Education:

Name of nearest Relative with phone no: Date & Time of Admission:

Discharge:

Presenting Complaints: **Total Duration:**

History of present Illness:

History of past Illness with treatment:

Treatment History of present Illness:

Family History:

Personal History:

Fetal History:

Birth History:

Menstrual History: (in the case of woman):

Obstetric History: (in the case of woman):

Diet :(Commonly included ingredients) (Any notable points on Virudhahara)

Habits :(Addictions) (Mode of work) (Sleep/ rest pattern)

General Examination:

Physical Examination:

Temperature:	Pulse Rate:	Heart Rate:	Resp. Rate:
B.P:	Body Weight:	Koshta:	Akruthi:

Systemic Examination:

Gastro Intestinal System: Cardio Vascular System:

Respiratory System: Skin & Appendages: Others:

Dashavidha Pareeksha:

Dushyam:	Dosham:	Desam:	Deham:	Bhumi:
	Dhatu:	Balam:	Rogi:	Rogam:
	Malam:			
Kalam:	Ksnadi:	Vyadhivridhi:	Chikitsa:	
Vyadhyavastha:				
Anala:	Prakruthi:	Vaya:	Satva:	
Satmya:	Ahara:	Vihara		
Ahara:	Jaranasakthi:	Abhyavaharanasakthi:		

Ashtasthana Pareeksha: (Observations. Doshas involved)

Nadi:	Jihwa:	Malam:	Mutram:
Drik:	Sabdam:	Sparsam:	Akruthi:

Routine & Specific Laboratory Investigations:

Blood:	Urine:	Stool:	Sputum:

Provisional Diagnosis:

Analysis of the Case:

Vishabheda: (Sthavara / Jangama / Kritrima / Doosheevisha/Garavisha/ Vishopama)

Sthavara vishabheda: ……..

Signs & Symptoms: Saamanya lakshana:

Vega Lakshana: Anubandha Upadrava:

Jangama vishabheda: ……

1. Characters of snake:
2. Place of bite (Damsa sthaana)
3. Time of bite (Damsa samaya):
4. Time elapsed between bite & Admission:
5. Part of body affected:
6. Nature of bite (Damsasya bhaava):
7. Signs& Symptoms (Damsa lakshanaani):
8. Samanya Lakshana:
9. Vega lakshanaani:
10. Anubandha upadravaani:
11. Arishta lakshanaani:

Kritrima vishabheda: …….

Signs& Symptoms: Saamanya Lakshanaani:

Kritrimavisha pratiniyata lakshanaani:

Doosheevisha:

Lakshanaani: Doosheevishajanya roga:

Anubandha upadrava: Indriya pareeksha:

Vishopama Samprapti:

Virudhahara:

Type of virudha: Factors involved: Samanya Lakshana:

Ama :

Doshadhikya: Samanya Lakshana:

Dosha & Vikruta lakshanaani: **Dooshya & Vikruta lakshanaani:**

Srotas & Dushti lakshanaani: **Vyaadhyadhishtaanam:**

Vyadhi Margam:

Diagnosis:

Differential (with reason): Actual:

Treatment:

Chaturvimshati upakrama:

Saamanya chikitsa: Sodhana chikitsa: Samana chikitsa:

Details of Treatment

Date	Observations	Medicines/Procedure	Dose/ Time	Duration

Pathya: Ahara: Vihara: **Apathya:** Ahara: Vihara:

Chikitsaphalam:

Advice given at the time of discharge:

Sl.No	Medicine	Dose	Duration	Anupana

Signature of MO in Charge Signature of Student

MEDICAL CERTIFICATE OF CAUSE OF DEATH

I hereby certify that the deceased Shri/Smt/Km……. son of/wife of/daughter of ..... resident of. ……was under my treatment from.....to..... And he/she died on……at…….. AM/PM.

Name of institution	Hospital in-Patients (Not to be used for still births)			Admission no.
Name of deceased	Gender	Marital status	Date of birth	Date and time of death
	m/f			
Age at death	Age in completed in years	If less than 1 year age in month	If less than one month age in days	If less than 1 day , age in hrs
Address				
Cause of Death				
Immediate cause (Disease or condition directly leading to death)			Approximate Interval between onset and death	
Antecedent Causes (Morbid conditions, If any, giving rise to the above cause, stating the underlying condition last.)				
Contributory Cause Other Significant Conditions contributing to the death but not related to the disease condition causing it.				

If deceased was a female, was pregnancy the death associated with?- YES/NO

If yes, was there a delivery?- Yes/ No

Name and signature of the Medical Attendant certifying the cause of death

Date of Certificate.....

(To be detached and handed over to the related of the deceased)

Certified that Shri/Smt/Km…..... S/W/D of Shri ..... R/O..... Was under treatment from……....And he/she expired on..... at ..... AM/PM

Doctor.....

Signature and address of Medical Practitioner/ Medical attendant with Registration No.

PROFARMA FOR EXAMINATION AND REPORT OF A CASE OF INJURY

Requisition from S.I. of Police .....vide letter no:……Dated:….

For examination of .....Escorted by P.C.No:…., Name:-

Place of Examination: Date and Time of Examination:

1. Name: .....
2. S/o/W/o /D/o.....
3. Address:.....
4. Age as stated: .....,..... .
5. Religion:.....
6. Occupation:.....
7. Brought and identified by.....
8. Consent given in writing:

   I .....s/o,d/o,w/o .....with complete consciousness, free-will and without any pressure give consent for medical examination. I have been clearly explained about the examination and the result/findings could be in my favour or against.

Signature

9. Examination in presence of :
10. Identification marks: a..... b .....
11. History as given by the patient (if unable to speak by the person accompanying the patient):

a) How the injury was sustained, if assaulted, no. of persons who assaulted
b) Whether any weapon was used, if so what type of weapon; if it was hard, blunt or sharp cutting or pointed etc.
c) Date and time of infliction of injury.
d) Whether any first aid treatment was given anywhere
e) Whether dying declaration is/was recorded as required.

12. On Examination:
    a. If unconscious: degree of unconsciousness,
    b. BP/Pulse:
    c. Respiratory rate
    d. Pupils
    e. RS
    f. CVS
    g. P/A
    h. Any bleeding from nostrils, ears, mouth etc.
    i. Prognosis good/uncertainn
13. Physical examination: Each injury is to be described as follows:

Material Preserved……
……

Advice……
……

Final Opinion……
……

Sr.no	Nature of injury	Size	Site	Description, duration of Injury	Simple or Grievous	By Type of weapon inflicted

Name and Signature of M.O

MEDICAL FITNESS CERTIFICATE

This is to certify that I have carefully examined Mr./ Mrs…....….S/O, D/O,……..aged..of……..Village……District…… ……State…….Pin Code……..

He/she is in good mental and physical health and is free from any physical defects such as deafness, colour blindnes,and any chronic or contagious diseases.
This certificate is being issued to him/ her for the purpose of…….

Date.....

Signature of the Candidate.....

Name of Medical Officer.....

Registration No.....

Signature with Seal.....

MEDICAL CERTIFICATE

Signature of applicant.....

I, Dr.....after careful personal examination of case herby certify that .....whoes signature is given above, is suffering from.....that I consider that a period of absence from duty for.....with effect from .....to.....is absolutely for restoration of his/her health.

Place.....

Date..... **MEDICAL OFFICER**

CERTIFICATE OF MEDICAL FITNESS

Signature of Applicant.....

I, Dr.....do hereby certify that I have carefully examined Mr./ Mrs.....of the.....who was suffering from.....and whose signature is given above, and find that he/ she has recovered from his/ her illness and is now fit to resume duties. I also certify that before arriving at this decision I have examined original medical certificates and statements of the case on which leave was granted or extending, and have taken these in consideration in arriving at my decision.

Place.....

Date..... **MEDICAL OFFICER**

Course curriculum for Second Professional BAMS

(PRESCRIBED BY NCISM)



Samhita Adhyayan-2

(SUBJECT CODE : AyUG-SA2)

(Applicable from 2021-22 batch, from the academic year 2023-24 onwards for 5 years or until further notification by NCISM, whichever is earlier)

ncism

।। आयुषे सर्वलोकानाम् ।।

SCAN ME

SA2

BOARD OF AYURVEDA
NATIONAL COMMISSION FOR INDIAN SYSTEM OF MEDICINE
NEW DELHI-110058

NCISM

II Professional Ayurvedacharya (BAMS)

Subject Code : AyUG-SA2

Summary

Total number of Teaching hours: 240			
Lecture hours(LH)-Theory		100	100(LH)
Paper I	100		
Non Lecture hours(NLH)-Theory		140	140(NLH)
Paper I (40)	140		
Non Lecture hours(NLH)-Practical ##			
Paper I (100)			

Examination (Papers & Mark Distribution)					
Item	**Theory Component Marks**	**Practical Component Marks**			
		Practical	**Viva**	**Elective**	**IA**
Paper I	100	-	75	(Set SB) 10	15
Sub-Total	100	100			
Total marks	200				

Important Note:-The User Manual II BAMS is a valuable resource that provides comprehensive details about the curriculum file. It will help you understand and implement the curriculum. Please read the User Manual II before reading this curriculum file. The curriculum file has been thoroughly reviewed and verified for accuracy. However, if you find any discrepancies, please note that the contents related to the MSE should be considered authentic.

In case of difficulty and questions regarding curriculum write to cur.imp@ncismindia.org

Details in Practical list, Table 4 and Table 4a

PREFACE

In continuation with the curriclum reforms started previous year, **Samhita Adhyayan-2** focuses on learning Samhita with due significance to the methodology of textual structuring and interpretation. Charakasamhita is taken as a model text here considering its vast contributions to Ayurveda. Students who learn Ayurveda will benefit by Samhita Adhyayan to comprehend sense of importance of its traditional classical literature. SA2 tries to justify the methodology of structuring samhita and appraise the importance of tools of decoding samhita such as tantrayukti and vyakhyana. Relating and interpreting the various references, explaining and interpreting important sidhantas, applying sidhantas in clinical practice, making use of specific diagnostic and assessment guidelines mentioned in Carakasamhita, demonstrating principles of management of various clinical conditions etc. are some of the thrust areas addressed. Importance of by hearting important slokas also is highlighted. The content of SA2 belongs to 54 chapters of Carakasamhita viz. Sutrasthana (18 chapters 13-30, initial 12 chapters already dealt in SA1), Nidanasthana (8 chapters), Vimanasthana (8 chapters), Shareerasthana (8 chapters) and Indriyasthana (12 chapters). Each chapter is taken as a unit in the syllabus. A chapter starts with short introduction (**adhyaya parichaya**) through justifying the position of the chapter and introducing key terms in the chapter. This is followed by explaining important sidhantas (**sidhanta-vivarana**) in the chapter. At the end summary of the chapter (**adhyayasangraha**) is done with the help of summarizing slokas at the end of the chapter. This will help students to map the whole content of the chapter, even though some of them are not dealt in detail during sidhanta-vivarana. **Sloka sangraha** (compilation of sloka) compiles the most important slokas in the chapter. Application of **Tantrayukti** and **Vyakhyana** in proper understanding of Samhita also is envisaged as a separate section while planning practicals. Efforts have been taken to design some interesting and innovative activities and practical as a part of developing this syllabus. They have been added to resepective tables here. It does not restrict our teachers from designing and implementing more attractive and effective activities or customizing those ones which are enlisted, as and when needed, without loosing spirit of the new outlook.

INDEX

Course Code and Name of Course 5
Table 1- Course learning outcomes and matched PO 5
Table 2 : Contents of Course 6
Paper 1 6
Table 3: Learning objectives (Theory) of Course 18
Paper 1 18
List of Practicals 72
Table 4: Learning objectives (Practical) 74
Practical 1 74
Table 4a: List of Practical 81
Activity 91
Table 5- Teaching learning method 95
Table 6: Assessment Summary: Assessment is subdivided in A to H points 96
6 A-Number of Papers and Marks Distribution 96
6 B - Scheme of Assessment (formative and Summative) 96
6 C - Calculation Method for Internal assessment Marks 98
6 D - Evaluation Methods for Periodical Assessment 98
6 E Question Paper Pattern 99
6 F Distribution of theory examination 100
Paper 1 100
6 G Blue print of paper I 104
6 H Distribution of Practical Exam 108
References Books/ Resources 109
Abbreviations 111

Course Code and Name of Course

Course code	Name of Course
AyUG-SA2	Samhita Adhyayan-2

Table 1- Course learning outcomes and matched PO

SR1 CO No	A1 Course learning Outcomes (CO) AyUG-SA2 At the end of the course AyUG-SA2, the students should be able to-	B1 Course learning Outcomes matched with program learning outcomes.
CO1	**Justify the Methodology of structuring samhitas and appraise the importance of tools of decoding Charakasamhita (Tantrayukti and vyakhyana)**	PO1
CO2	**Relate and interpret various references of concepts in Charakasamhita**	PO1
CO3	**Explain and interpret biological factors and their measurements in the manifestation of diseases.**	PO1,PO3
CO4	**Explain and utilize various siddhantas in different dimensions of clinical practice.**	PO1,PO3,PO5
CO5	**Demonstrate the knowledge of dravya and adravya based therapeutics.**	PO1,PO3,PO5
CO6	**Apply diagnostic guidelines regarding diseases including arishta lakshana based on the principles mentioned in Charakasamhita**	PO1,PO3,PO7
CO7	**Explore the determinants of health in the background of Charakasamhita.**	PO1
CO8	**Develop ethical professional and moral codes and conducts as a physician.**	PO6,PO8,PO9

Table 2 : Contents of Course

Paper 1					
Sr. No	**A2 List of Topics**	**B2 Term**	**C2 Marks**	**D2 Lecture hours**	**E2 Non-Lecture hours**
1	**Cha.Su.13- Sneha Adhyaya** **I. Adhyaya parichaya** **II. Siddhanta vivarana** 1. Sneha yoni 2. Chaturvidha sneha and its qualities 3. Sneha kaala and its anupana 4. Pravicharana sneha 5. Acchapeya 6. Sneha matra and its indications 7. Introduction to sneha yogya and ayogya purusha 8. Introduction to ayoga, samyak yoga and atiyoga of snehapana 9. Koshta pariksha 10. Introduction to snehapana vidhi 11. Introduction to sadyasneha 12. Sneha vyapat kaarana, lakshana and chikitsa **III. Adhyaya sangraha**	1	37	3	1
2	**Cha.Su.14- Sveda Adhyaya** **I. Adhyaya parichaya** **II. Siddhanta vivarana** 1. Benefits of swedana 2. Swedana bheda 3. Swedana vidhi 4. Samyak swinna lakshana 5. Atiswinna lakshana and chikitsa 6. Swedana yogya and ayogya 7. Trayodasha agni sweda vivarana 8. Dasha vidha niragni sweda **III. Adhyaya sangraha**	1		2	1
3	**Cha.Su.15- Upakalpaneeya Adhyaya** **I. Adhyaya parichaya** **II. Siddhanta vivarana** 1. Samshodhana upayogi dravya sangraha 2. Aturalaya nirmana 3. Introduction to vamana vidhi 4. Samsarjana krama 5. Introduction to virechana vidhi 6. Benefits of samshodhana **III. Adhyaya sangraha**	1		2	3
4	**Cha.Su.16- Chikitsaprabhritiya Adhyaya** **I. Adhyaya parichaya**	1		2	2

	II. Siddhanta vivarana 1. Samyak virikta – avirikta - ativirikta lakshana 2. Bahudosha lakshana 3. Benefits of samshodhan 4. Importance of samshodhan 5. Samshodhana atiyoga and ayoga chikitsa 6. Swabhavoparama vada 7. Chikitsa paribhasha 8. Qualities of chikitsa-prabhrita vaidya **III. Adhyaya sangraha**				
5	**Cha.Su.17- Kiyantashiraseeya Adhyaya** **I. Adhyaya parichaya** **II. Siddhanta vivarana** 1. Importance of shiras 2. Introduction to shiroroga, hridroga, vidradhi, madhumeha and madhumeha pidaka 3. 62 types of permutation and combination of doshas 4. Trayodasa sannipata (13 types of combination of doshas) 5. 12 types of vishama sannipata (Doshavikalpa) 6. Types of kshaya 7. Ojus 8. Doshagati **III. Adhyaya sangrah**	1		3	0
6	**Cha.Su.18-Trisotheeya Adhyaya** **I. Adhyaya parichaya** **II. Siddhanta vivarana** 1. Types of shotha 2. Trividha bodhya (three types of assessment of diseases) 3. Ekadeshaja shotha 4. Aparisankhyeyatwa of roga 5. Anukta roga (unnamed diseases) and its management 6. Karmas of prakrita doshas **III. Adhyaya sangraha**	1		1	3
7	**Cha.Su.19-Ashtodareeya Adhyaya** **I. Adhyaya parichaya** **II. Siddhanta vivarana** 1. Sankhya samprapti of samanyaja vyadhi 2. Tridosha pradhanyata 3. Nija-agantu sambandha **III. Adhyaya sangraha**	1		1	3
8	**Cha.Su.20- Maharoga adhyaya** **I. Adhyaya parichaya** **II. Siddhanta vivarana** 1. Vyadhibheda (classification of disease) 2. Agantu-mukha (causes of agantu diseases) 3. Trividha-prerana (three etiological factors) 4. Samanyaja-nanatmaja-vikara – classification	1		2	2

	5. Vataja-nanatmaja vikaras, atmarupa and prakupitakarma 6. Pittaja- nanatmaja vikaras, atmarupa and prakupitakarma 7. Kaphaja- nanatmaja vikaras, atmarupa and prakupitakarma **III. Adhyaya sangraha**				
9	**Cha.Su.21- Ashtauninditeeya adhyaya** **I. Adhyaya parichaya** **II. Siddhanta vivarana** 1. Ashta nindita purusha 2. Ati sthula and ati karshya 3. Ashta dosha of sthaulya 4. Dosha-lakshana-hetu of karsya and sthaulya 5. Prasasta purusha lakshana 6. Chikitsa sutra of sthaulya and karsya 7. Nidra paribhasha 8. Arha and varjya for divaswapna 9. Effects of ratri jagarana and divaswapna 10. Types of Nidra **III. Adhyaya sangraha**	1		3	3
10	**Cha.Su.22- Langhanabrimhaneeya Adhyaya** **I. Adhyaya parichaya** **II. Siddhanta vivarana** 1. Shadupakrama 2. Swaroopa and lakshana of shadupakrama 3. Dasavidhalanghana 4. Dasavidhalanghana-prayoga-niyama 5. Properties of dravyas used in shadupakrama 6. Samyaklakshana of langhana, brimhana and sthambhana 7. Atiyoga and ayoga of shadupakrama **III. Adhyaya sangraha**	1		3	2
11	**Cha.Su.23- Santarpaneeya Adhyaya** **I. Adhyaya parichaya** **II. Siddhanta vivarana** 1. Santarpana dravya 2. Santarpanajanya vyadhi 3. Chikitsasutra of santarpanajanya vyadhi 4. Apatarpanajanya vyadhi 5. Chikitsasutra of apatarpanajanya vyadhi **III. Adhyaya sangraha**	1		2	0
12	**Cha.Su.24- Vidhishoniteeya Adhyaya** **I. Adhyaya parichaya** **II. Siddhanta vivarana** 1. Shonita-pradhanyata 2. Shonita-dushti-karana 3. Shonitajanya roga 4. Shonita-dushti-chikitsa 5. Raktadushtilakshana in relation to dosha	1		3	2

	6. Vishuddharaktalakshana 7. Vishuddharakta-purusha-lakshana 8. Pathya in raktamoksha 9. Introduction to mada-murchaya-sanyasa **III. Adhyaya sangraha**				
13	**Cha.Su.25- Yajjapurusheeya Adhyaya** **I. Adhyaya parichaya** **II. Siddhanta vivarana** 1. Factors responsible for generation of purusha and diseases 2. Concept of hita ahara and its importance 3. Different factors related with ahara like aharayoni, prabhava, udarka, upayoga, rasa, gurvadi guna etc 4. Agryasangraha- (Aushadha- Anna-Vihara) 5. Terminology of pathya and apathya 6. Enumeration of aasavayoni **III. Adhyaya sangraha**	1		2	4
14	**Cha.Su.26- Atreyabhadrakaapyeeya Adhyaya** **I. Adhyaya parichaya** **II. Siddhanta vivarana** 1. Sambhasha parishat on number of rasa 2. Gunas of parthivadi dravyas 3. Dravya prabhava and guna prabhava 4. Dravya karmukata siddhanta (pharmacodyanamics) with respect to adhikarana, kala, karma, veerya, upaya and phala 5. Paradi guna 6. Rasadi-panchaka – Additional knowledge 7. Examples of samanapratyarabdha and vichitra pratyaarabdha dravyas 8. Properties of vipaka 9. Perception of rasa, vipaka and veerya 10. Examples of prabhava 11. Types of viruddha and management of complications 12. Principles of treatment of diseases caused by viruddha ahara **III. Adhyaya sangraha**	1		3	3
15	**Cha.Su.27- Annapaana vidhi Adhyaya** **I. Adhyaya parichaya** **II. Siddhanta vivarana** 1. Benefits of hita ahara 2. Examples of hita ahara and ahita ahaara 3. Ahara vargas 4. Importance of anna **III. Adhyaya sangraha**	1		4	2
16	**Cha.Su.28- Vividhashitapeeteeya Adhyaya** **I. Adhyaya parichaya** **II. Siddhanta vivarana**	1		4	14

	1. Caturvidha-ahara 2. Difference between hita aahara and ahita aahara 3. Susceptibility to diseases (with respect to pathya and apathya) 4. Vyadhi-saha shareera 5. Dhatupradoshaj, upadhatupradoshaj, indriyapradoshaja, malapradoshaja vikaras and treatment principles 6. Shakhagati and koshtagati of doshas 7. Causes of health and diseases 8. Importance of prajnaaparadha **III. Adhyaya sangraha**				
17	**Cha.Su.29- Dashapraanaayataneeya Adhyaya** **I. Adhyaya parichaya** **II. Siddhanta vivarana** 1. Enumeration of dasha pranaayatana 2. Terminology of praanaabhisara vaidya and rogaabhisara vaidya, chadmachara, yogya bhishak and karmakovida **III. Adhyaya sangraha**	2		2	2
18	**Cha.Su.30- Arthedashamahamooleeya Adhyaya** **I. Adhyaya parichaya** **II. Siddhanta vivarana** 1. Importance of hridaya 2. Best factors for life (shreshtatama bhava) 3. Four types of Ayu 4. Shashwatatwa of Ayurveda 5. Quality of Learner of Ayurveda 6. Ashtaprashna 7. Dashaprakaran 8. Synonyms of tantra **III. Adhyaya sangraha**	2		2	0
19	**Cha.Ni.01-Jwara nidana Adhyaya** **I. Adhyaya parichaya** **II. Siddhanta vivarana** 1. Description of nidanapanchaka 2. Nidanaparyaya 3. Vyadhiparyaya 4. Ashtavidha jwaranidana , samprapti and lakshana. 5. Jwarapurvarupa 6. Jwara mahaprabhava vivarana 7. Jwara samkshipta chikitsa sutra. 8. Importance of ghrutapaan in jeerna jwara. **III. Adhyaya sangraha**	2	19	2	2
20	**Cha.Ni.02-Raktapitta nidana Adhyaya** **I. Adhyaya parichaya** **II. Siddhanta vivarana** 1. Raktapitta paryaya and nirukti. 2. Raktapitta nidan, purvarupa, upadrava	2		2	2

	3. Raktapitta marga, dosha anubhandha and sadhyaasdhyata. 4. Raktapitta chikitsa sutra **III. Adhyaya sangraha**				
21	**Cha.Ni.03-Gulma nidana Adhyaya** **I. Adhyaya parichaya** **II. Siddhanta vivarana** 1. Sankhya samprapti 2. Gulma sthanas 3. Nidana, lakshana and samprapti of vata-pitta-kahpaja gulma 4. Shonita gulma 5. Gulma purvarupa 6. Sadhya asadhya 7. Chikitsa sutra **III. Adhyaya sangraha**	2		2	2
22	**Cha.Ni.04-Prameha nidana adhyaya** **I. Adhyaya parichaya** **II. Siddhanta vivarana** 1. Sankhyasamprapti (vimsatiprameha) 2. Sampraptighataka (doshavisesha and dushyavisesha) 3. Nidanapanchaka of doshaja prameha (vata, pitta and kapha) 4. Sadhyasadhyata 5. Poorvarupa 6. Upadrava 7. Chikitsasutra **III. Adhyaya sangraha**	2		2	3
23	**Cha.Ni.05-Kushta nidana Adhyaya** **I. Adhyaya parichaya** **II. Siddhanta vivarana** 1. Saptadravya of kushta 2. Aneka rupa of kushta 3. Samanya nidana and samanya purvarupa 4. Sadhyasadhyata 5. Sapta kushta lakshana 6. Upadrava **III. Adhyaya sangraha**	2		2	4
24	**Cha.Ni.06-Shosha nidana Adhyaya** **I. Adhyaya parichaya** **II. Siddhanta vivarana** 1. Visesha nidana, samprapti and lakshana of shosha 2. Purvarupa 3. Ekadasa rupa 4. Sadhyasadhyata **III. Adhyaya sangraha**	2		2	2

25	**Cha.Ni.07-Unmada nidana Adhyaya** **I. Adhyaya parichaya** **II. Siddhanta vivarana** 1. Sankhya samprapti 2. Unmadaabhimukha karana (predisposing factors of unmada) 3. Unmada nirvacana (ashta vibhrama) 4. Purvarupa 5. Vata-pitta-kapha-sannipataj unmada lakshna 6. Role of prajnaparadha 7. Chikitsasutra of unmada 8. Agantuja unmada- nidana, purvarupa, lakshana, chikitsa sutra **III. Adhyaya sangraha**	2		2	4
26	**Cha.Ni.08-Apasmara nidana adhyaya** **I. Adhyaya parichaya** **II. Siddhanta vivarana** 1. Definition of apasmara 2. Apasmaraabhimukakarana (predisposing factors of unmada) 3. Vishesha lakshana of apasmara 4. Cikitsasutra 5. Nidanarthakara roga 6. Vyadhisankara 7. Suddha-asuddha cikitsa 8. Sadhyasadhyata – nirvacana 9. Tiryaggatadosha - cikitsasutra **III. Adhyaya sangraha**	2		2	4
27	**Cha.Vi.01- Rasa vimana Adhyayam** **I. Adhyaya parichaya** **II. Siddhanta vivarana** 1. Importance and objective of vimanasthana 2. Prakrutisamasamaveta and vikrutivishamasamaveta siddhanta 3. Chaturvidha Prabhava (rasa-dravya-dosh-vikara prabhava) 4. Examples of dravyaprabhava- taila, ghruta and madhu. 5. Dravyas which are avoided for regular consumption 6. Satmyaparibhasha and types 7. Aharavidhi visheshayatana 8. Ahara vidhi vidhana and bhojyasaadgunyam **III. Adhyaya sangraha**	3	24	2	3
28	**Cha.Vi.02-Trividha kuksheeya Adhyayam** **I. Adhyaya parichaya** **II. Siddhanta vivarana** 1. Three divisions of amashaya for deciding aharamatraa 2. Matraavat ahaara lakshan	3		2	0

	3. Amatravatva of ahara 4. Effects of heenamaatra and atimatra of ahara 5. Mental factors which affect the digestion of food 6. Two types of amadosha 7. Hetu-linga and aushasdha of amadosha 8. Demarcation of amasaya **III. Adhyaya sangraha**				
29	**Cha.Vi.03-Janapadodhwansaneeya Vimanam Adhyaya** **I. Adhyaya parichaya** **II. Siddhanta vivarana** 1. Importance of timely collection of medicines. 2. Janapadodhwamsakara samanya bhavas (four causes of epidemic diseases) 3. Lakshanas of vikrut vayu, jala, desha and kala. 4. Chikitsa siddhanta of janapadodhwamsakara vikaras 5. Role of adharma in janapadodwamsa 6. Niyata and aniyata ayu 7. Daiva and purushakara 8. Examples of hetuviparita chikitsa in jwara 9. Apatarpana and its types 10. Description of desha **III. Adhyaya sangraha**	3		2	2
30	**Cha.Vi.04-Trividha roga vishesha vijnyaneeya adhyaya** **I. Adhyaya parichaya** **II. Siddhanta vivarana** 1. Three methods of diagnosing diseases 2. Characteristics of aptopadesh, pratyaksha and anumana 3. Application of aptopadesha, pratyaksha and anumana in clinical examination **III. Adhyaya sangraha**	3		2	3
31	**Cha.Vi. 05- Sroto vimana Adhyaya** **I. Adhyaya parichaya** **II. Siddhanta vivarana** 1. Srotas paribhasha 2. Types of srotas 3. Types of srotodushti 4. Hetu, lakshan and chikitsa of strotodushti **III. Adhyaya sangraha**	3		2	2
32	**Cha.Vi. 06-Roganika vimana adhyaya** **I. Adhyaya parichaya** **II. Siddhanta vivarana** 1. Dvividha vyadhi bhedha based on prabhava, bala, adhishthana, nimitta, ashaya bheda. 2. Vyadhi aparisamkheyatva 3. Relation between shareerika and manasika dosha. 4. Anubhandhy-anubandha roga 5. Agni bheda, prakruti bheda.	3		2	2

	6. Vatala prakrutigata roga, their hetu and chikitsa, pitta prakrutigata roga, their hetu and chikitsa-kapha-prakrutigata roga, their hetu and chikitsa 7. Raja vaidya gunas **III. Adhyaya sangraha**				
33	**Cha.Vi. 07- Vyadhita rupeeya vimana Adhyaya** **I. Adhyaya parichaya** **II. Siddhanta vivarana** 1. Dvividha vydhita purusha based on severity of disease and clinical presentation 2. Krimi bheda 3. Trividha chikitsa **III. Adhyaya sangraha**	3		2	2
34	**Cha.Vi. 08-Rogabhishagjiteeyam Adhyaayam.** **I. Adhyaya parichaya** **II. Siddhanta vivarana** 1. Shastra pareeksha 2. Means of learning shastra 3. Adhyayana and adhyapana vidhi 4. Sambhasaha vidhi- Types 5. Three types of parishat 6. Vadamarga padani 7. Methodology of Vada and its benefits 8. Dashavidha pareeksya bhava 9. Dashavidha atura pareeksha **III. Adhyaya sangraha**	3		5	11
35	**Cha.Sha.01-Katithapurusheeya Adhyaya** **I. Adhyaya parichaya** **II. Siddhanta vivarana** 1. Sareera and sareerasthana 2. Purusha and its types 3. Manonirupanam 4. Atmalinga 5. Ashtaprakriti and shodasavikara 6. Srishtyutpatti and pralaya 7. Trividha dukhahetu 8. Prajnaparadha 9. Daiva 10. Naishtikichikitsa 11. Vedana and vedana adhishtana 12. Vedananasahetu 13. Moksha 14. Smriti hetus **III. Adhyaya sangraha**	2	13	2	3
36	**Cha.Sha.02-Atulyagothreeyam Adhyaaya** **I. Adhyaya parichaya** **II. Siddhanta vivarana**	2		1	0

	1. Prerequisites of conception 2. Shodashadhatu in shareera 3. Sexual abnormalities 4. Sadyogriheeta garbhinee lakshana 5. Ativahikapurusha 6. Daiva & paurusha 7. Roganutpatti **III. Adhyaya sangraha**				
37	**Cha.Sha.03-Khuddika garbhavakranti Adhyaya** **I. Adhyaya parichaya** **II. Siddhanta vivarana** 1. Matrujadi bhavas in garbha 2. Beeja & beejabhaga **III. Adhyaya sangraha**	2		1	0
38	**Cha.Sha.04-Mahatee garbhavakranti Adhyaya** **I. Adhyaya parichaya** **II. Siddhanta vivarana** 1. Garbha & garbhaposhana 2. Garbhopaghatakara bhava 3. Congenital abnormalities 4. Trividhasatva bheda (manasaprakriti) **III. Adhyaya sangraha**	2		1	2
39	**Cha.Sha.05-Purushavichaya Shareera Adhyaya** **I. Adhyaya parichaya** **II. Siddhanta vivarana** 1. Lokapurushasamya 2. Hetwadi panchaka 3. Satya buddhi **III. Adhyaya sangraha**	2		1	4
40	**Cha.Sha.06-Sareeravichaya adhyaya** **I. Adhyaya parichaya** **II. Siddhanta vivarana** 1. Definition of sareera 2. Samanyavisesha sidhanta – applied aspect 3. Shareera dhatuguna 4. Shareeravriddhikarabhava 5. Balavriddhikarabhava 6. Aharaparinamakarabhava 7. Sareeraguna bheda 8. Kala-akala mrityu 9. Param ayu karanam **III. Adhyaya sangraha**	2		1	2
41	**Cha.Sha.07- Sareerasankhya sareera Adhyaya** **I. Adhyaya parichaya** **II. Siddhanta vivarana** 1. Paramanu bheda of shareera	2		1	2

	III. Adhyaya sangraha				
42	**Cha.Sha.08-Jathisutreeya Adhyaya** **I. Adhyaya parichaya** **II. Siddhanta vivarana** 1. Sutikagara 2. Garbhopaghatakara bhava **III. Adhyaya sangraha**	2		1	12
43	**Cha.In.1-Varnasvariyam Indriya Adhyaya** **I. Adhyaya parichaya** **II. Siddhanta vivarana** 1. Factors for assessing rishta 2. Six types of prakruti bhedha 3. Rishtaadhikara kruta vikruti bhedha 4. Prakruta and vaikarika varna 5. Varnavishayak arishta 6. Prakruta and vaikarika swara 7. Swara vishayak arishta **III. Adhyaya sangraha**	3	7	1	1
44	**Cha.In.2-Pushpitakam Indriya Adhyaya** **I. Adhyaya parichaya** **II. Siddhanta vivarana** 1. Gandha vishayaka samgrah 2. Rasa vishayaka arishta **III. Adhyaya sangraha**	3		1	0
45	**Cha.In.3-Parimarshaneeyam Indriyam Adhyaya** **I. Adhyaya parichaya** **II. Siddhanta vivarana** 1. Sparshagamya bhava (palpable signs) 2. Sparshavishayak arishta lakshana **III. Adhyaya sangraha**	3		1	0
46	**Cha.In.4-Indriyaneekam Indriya adhyaya** **I. Adhyaya parichaya** **II. Siddhanta vivarana** 1. Indriya vishayaka arishta samanya niyama (general rule regarding involvement of indriya) **III. Adhyaya sangraha**	3		1	0
47	**Cha.In.5-Purvarupeeyam Indriyam Adhyaya** **I. Adhyaya parichaya** **II. Siddhanta vivarana** 1. Jvara rupa vishayaka poorvaroopiya rishta (rishta based on purvarupa of jvara) 2. Swapna bheda (types of swapna) **III. Adhyaya sangraha**	3		1	2
48	**Cha.In.6-Katamanisharireeyam Indriyam Adhyaya** **I. Adhyaya parichaya**	3		1	0

	II. Sidhanta vivarana 1. Rishta related to pureesha, mutra and swayathu **III. Adhyaya sangraha**				
49	**Cha.In.7-Pannarupiyam Indriyam Adhyaya** **I. Adhyaya parichaya** **II. Siddhanta vivarana** 1. Pratichaya vishayaka arishta 2. Chaya vikruti arishtas 3. Five types chaya bheda 4. Seven types prabha bheda **III. Adhyaya sangraha**	3		1	0
50	**Cha.In.8-Avakshiraseeyam Indriyam Adhyaya** **I. Adhyaya parichaya** **II. Adhyaya sangraha**	3		1	0
51	**Cha.In.9-Yasya shyavanimittiya Indriya Adhyaya** **I. Adhyaya parichaya** **II. Sidhanta vivarana** 1. Ashtamaharogas **III. Adhyaya sangraha**	3		1	0
52	**Cha.In.10-Sadyomaraneeyam Indriya Adhyaya** **I. Adhyaya parichaya** **II. Siddhanta vivarana** 1. Sadyo maraneeya arishtas **III. Adhyaya sangraha**	3		1	0
53	**Cha.In.11-Anujyotiyam Indriya Adhyaya** **I. Adhyaya parichaya** **II. Siddhanta vivarana** 1. Definition of Arishta **III. Shloka sangraha**	3		1	0
54	**Cha.In.12-Gomayachurniyam Indriya Adhyaya** **I. Adhyaya parichaya** **II. Siddhanta vivarana** 1. Mumurshu lakshana, 2. Prashasta doota lakshana and mangalika dravya. 3. Arogya janaka bhava **III. Adhyaya sangraha**	3		1	17
Total Marks			**100**	**100 hr**	**140 hr**

Table 3: Learning objectives (Theory) of Course

Paper 1									
A3 Course outcome	**B3** Learning Objective (At the end of the session, the students should be able to)	**C3** Domain/sub	**D3** Must to know / desirable to know / Nice to know	**E3** Level Does/ Shows how/ Knows how/ Know	**F3** T-L method	**G3** Assessment (Refer abbreviations)	**H3** Formative/ summative	**I3** Term	**J3** Integration
Topic 1 Cha.Su.13- Sneha Adhyaya (Lecture :3 hours, Non lecture: 1 hours)									
CO1,CO2	Justify the position of the chapter in the Samhita and its importance	CC	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	I	
CO2	Explain basic meaning and importance of key terms in the chapter such as sneha, snehayoni, caturvidhasneha, acchasnehapaana, sadyasneha and pravicharana.	CK	MK	K	L&GD,BS	QZ ,COM,TT-Theory,VV-Viva	F&S	I	
CO4,CO5	Enlist sthavara and jangam snehayoni Ch Su 13/9-11	CK	MK	K	L&GD,ML	M-POS,TT-Theory	F&S	I	
CO4,CO5	Justify why tila taila is the best among taila varga. Ch Su 13/12	CK	MK	KH	L,L&PPT,DA	T-EMI	F&S	I	
CO4,CO5	Explain qualities and mode of action of eranda taila Ch. Su 13/12	CK	DK	KH	L,L_VC,DA	T-EMI	F&S	I	
CO4,CO5	Enlist four types of sneha and justify sarpi as the best (shreshta).	CC	MK	KH	L,DIS	PRN,TT-Theo	F&S	I	

	Ch .Su 13/13				,DA	ry,VV-Viva			
CO4,CO5	Explain snehapaan kaala and anupaan Ch .Su 18-22	CK	MK	K	L&G D	TT-Theory,V V-Viva	F&S	I	
CO4,CO5	Define and enlist 24 types of pravicharana sneha and other types of sneha pravicharana. Ch Su 13/23, 24, 25, 27, 28	CC	MK	KH	L&G D	CL-PR,TT-Th eory,VV-Viva	F&S	I	
CO4,CO5	Explain acchasnehapaana and its importance Ch Su 13/26	CK	DK	KH	L&G D,RP, PL	TT-Theory,V V-Viva	F&S	I	
CO4,CO5	Enlist types of snehamatra Ch.Su 13/29-30	CC	MK	KH	L&G D,RE C	QZ ,TT-Theor y,VV-Viva	F&S	I	
CO4,CO5	Mention rule for duration of snehapaana Ch. Su 13/51	CC	MK	KH	L&G D,BS	PUZ,TT-Theo ry,VV-Viva	F&S	I	
CO4,CO5	Mention yogya and ayogya for snehana Ca Su 13/52-56.	CC	DK	KH	L,L& PPT,L &GD, CBL	TT-Theory,V V-Viva	F&S	I	V-PC
CO4,CO5	Summarize samyak snigdha lakshana, asnigdha lakshana and atisnigdha lakshana. Ch Su 13/57-59	CC	DK	KH	L&G D,D	P-ID,TT-Theo ry,VV-Viva	F&S	I	
CO2,CO4,CO 5	Summarise snehavyapat karana, lakshana and chikitsa Ch Su 75-79	CAP	NK	KH	L&G D,PL	TT-Theory,V V-Viva	F&S	I	
CO4,CO5	Figure out importance of pathya and apathya in snehapaan.Ch Su 13/60-61-64	CK	DK	KH	L&G D,SD L	M-CHT,TT-T heory,VV-Viva	F&S	I	
CO4,CO5	Explain pathyaapathya to be followed during and after	CC	MK	KH	L&G	CHK,TT-Theo	F&S	I	

	snehapaana. Ch Su 62-64				D,EDU	ry,VV-Viva			
CO4,CO5	Explain criteria's for assessing koshta. Ch Su 13/ 65-69.	CC	MK	KH	L&GD,CBL	TT-Theory,VV-Viva	F&S	I	
CO4,CO5,CO6	Illustrate types of koshtha in patients undergoing snehapana	PSY-SET	NK	SH	CBL,CD,D_BED	P-ID,VV-Viva	F&S	I	
CO4,CO5	Mention some examples for recipes of vicharanasneha.Ch Su 13/82-94	CK	DK	K	L,L&PPT	TT-Theory,VV-Viva	F&S	I	
CO4,CO5	Interpret the role of agni in sadyasneha Ca Su 13/96-97	CK	DK	K	L,L&GD,IBL	TT-Theory,VV-Viva	F&S	I	
CO1,CO2	Recite sutra no. Ch Su 13/13-17, 22, 57-59.	CK	MK	K	SDL,REC	P-REC	F&S	I	
CO1,CO2	Summarize the chapter as per Ch Su 13/100.	CK	NK	K	SDL	P-VIVA	F&S	I	
CO4,CO5	Relate dravya classification mentioned in Ch Su 1 (trividha) with snehayoni	CAP	MK	KH	DIS	PRN	F	I	
Topic 2 Cha.Su.14- Sveda Adhyaya (Lecture :2 hours, Non lecture: 1 hours)									
CO1,CO2	Justify the position of the chapter in the samhita and its importance	CC	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	I	
CO2	Explain basic meaning and importance of key terms in the chapter such as agnisweda, niragnisweda, snigdhapurva, ruskhapurva and trayodasasweda	CK	MK	K	L&GD,BS	QZ ,COM,TT-Theory,VV-Viva	F&S	I	
CO4,CO5	Explain the benefits of swedana. Ch Su 14/ 3-5	CC	MK	KH	L&G	TT-Theory,V	F&S	I	

					D,RLE	V-Viva			
CO4,CO5	Explain samyak swedana and ati swedana lakshana Ch Su 14/13-15	CC	MK	KH	L&GD	TT-Theory,VV-Viva	F&S	I	
CO4,CO5	Summarize the indications and contraindications for swedana Ch Su 14/ 16-24.	CC	DK	KH	L&GD,CBL	TT-Theory,VV-Viva	F&S	I	
CO4,CO5	Differentiate pinda sweda, nadi sweda, avagah sweda and upanaha sweda with respect to the drugs used and procedure. Ch Su 14/25-37.	CC	DK	KH	L&GD,L_VC,CBL	TT-Theory,VV-Viva	F&S	I	
CO4,CO5	Enlist 13 types of agni sweda. Ch Su 14/39-63	CC	MK	KH	L&PPT,L_VC	QZ ,TT-Theory,VV-Viva	F&S	I	
CO4,CO5	Enlist 10 types of niragnisweda Ch. Su 14/64.	CC	MK	KH	L,L&GD	O-QZ,TT-Theory,VV-Viva	F&S	I	
CO4,CO5	Enlist three classifications of dvividha sweda. Ch Su 14/66	CK	MK	KH	L&GD	M-CHT,TT-Theory,VV-Viva	F&S	I	
CO1,CO2	Recite sutras Ch Su 14/4,5,39,40,64.	CK	MK	K	SDL,REC	P-REC	F&S	I	
CO1,CO2	Summarize the chapter as per sutra Ch Su 14/68-71	CK	NK	K	SDL	P-VIVA	F&S	I	
Topic 3 Cha.Su.15- Upakalpaneeya Adhyaya (Lecture :2 hours, Non lecture: 3 hours)									
CO1,CO2	Justify the position of the chapter in the Samhita and its importance	CK	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	I	

CO1,CO2	Explain basic meaning and importance of key terms in the chapter such as sambharan, aturaalaya, samsarjan krama.	CK	MK	K	L&GD,BS	QZ ,COM,TT-Theory,VV-Viva	F&S	I	
CO4,CO5	Summarize the guidelines for Vaidyas before commencing chikitsa Ch Su 15/3-5.	CK	DK	KH	L&GD	M-CHT,TT-Theory,VV-Viva	F&S	I	
CO4,CO5	Enlist samshodhana upayogi dravya sangraha Ch Su 15/6	CK	MK	KH	L&GD	QZ ,TT-Theory,VV-Viva	F&S	I	
CO4,CO5	Figure out the procedure of vamana karma. Ch Su 15/9-15	CC	DK	KH	L&GD,RP	CHK,TT-Theory,VV-Viva	F&S	I	
CO4,CO5	Explain samsarjana krama Ch Su 15/16	CC	MK	KH	L,L&GD	CL-PR,TT-Theory,VV-Viva	F&S	I	
CO4,CO5	Identify merits of samsarjanakrama in patients	PSY-SET	NK	SH	BS,IBL,D_BED	P-CASE,SP	F&S	I	
CO4,CO5	Outline procedure for virechana karma Ch Su 15/17-18	CC	DK	KH	L&GD,RP	CHK,TT-Theory,VV-Viva	F&S	I	
CO4,CO5	Explain benefits of samshodhana. Ch Su 15/22.	CC	MK	KH	L,L&GD	TT-Theory,VV-Viva	F&S	I	
CO5,CO7	Relate the structure of aturalaya (hospital) with the present scenario	CAP	DK	KH	DIS,BS,PrBL	DEB,M-MOD,INT	F	I	
CO1	Recite sutra Ch Su 15/22	CK	MK	K	SDL,REC	P-REC	F&S	I	
CO1	Summarize the chapter as per sutra Ch Su 15/2-25	CK	NK	K	SDL	P-VIVA	F&S	I	

Topic 4 Cha.Su.16- Chikitsaprabhritiya Adhyaya (Lecture :2 hours, Non lecture: 2 hours)									
CO1,CO2	Justify the position of the chapter in the Samhita and its importance.	CC	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	I	
CO2	Explain basic meaning and importance of key terms such as bahudosha lakshana, swabhaavoparamvaada, chikitsaprabhirta.	CK	MK	K	L&GD,BS	QZ ,COM,TT-Theory,VV-Viva	F&S	I	
CO4,CO5	Summarize samyak virikta –avirikta – ativirikta lakshana. Ch Su 16/6-10	CC	DK	KH	L&GD,D	RS,TT-Theory ,VV-Viva	F&S	I	
CO4,CO5	Explain bahudosha lakshana Ch Su 16/13-16	CC	MK	KH	L&GD	PUZ,TT-Theory,VV-Viva	F&S	I	
CO3,CO6	Identify bahudoshalakahana in patients	PSY-SET	DK	SH	CBL,D_BED	P-VIVA	F&S	I	
CO4,CO5	Explain benefits and importance of samshodhana. Ch .Su 16/16-21	CC	MK	KH	L&GD	TT-Theory,VV-Viva	F&S	I	
CO4,CO5	Explain swabhavoparama vada Ch Su 16/ 27-32	CC	MK	KH	L&GD,BS	DEB,TT-Theory,VV-Viva	F&S	I	
CO2,CO5	Outline chikitsa of ayoga, atiyoga of samsodhana	CAP	DK	KH	L_VC,CBL,D	SP,TT-Theory ,VV-Viva	F&S	I	
CO4,CO5	Define chikitsa Ch Su 16/34-36	CC	MK	KH	L&GD	TT-Theory,VV-Viva	F&S	I	
CO4,CO8	Appreciate benefits of chikitsa prabhruta bhishak. Ch Su. 16/37-38	CK	DK	KH	L&GD,D	TT-Theory,VV-Viva	F&S	I	
CO1	Recite sutras Ch Su 16/13-21,27,28,34-36	CK	MK	K	SDL,	P-REC	F&S	I	

					REC				
CO4,CO6,CO 7	Relate swabhavoparama with concept of nidana parivarjana	CAP	MK	KH	DIS	PRN	F	I	
CO1	Summarize the chapter as per sutra Ch Su 16/39-41	CK	NK	K	SDL	P-VIVA	F&S	I	
Topic 5 Cha.Su.17- Kiyantashiraseeya Adhyaya (Lecture :3 hours, Non lecture: 0 hours)									
CO1,CO2	Justify the position of the chapter in the Samhita and its importance	CC	MK	K	L&G D	INT,TT-Theor y,VV-Viva	F&S	I	
CO2	Explain basic meaning and importance of key terms in the chapter such as doshagati, doshavikalpa, trayodasasannipata	CK	MK	K	L&G D,BS	QZ ,COM,TT-Theory,VV-Viva	F&S	I	
CO2,CO3	Explain importance of shiras. Ch Su 17/12	CK	MK	K	L&G D	TT-Theory,V V-Viva	F&S	I	
CO3,CO4	Enlist types of siroroga, hridroga and vidradhi	CC	MK	KH	L&G D	SP,TT-Theory	F&S	I	
CO3,CO4	Figure out 62 types of permutation and combination of doshas Ch Su 17/41-44	CK	DK	K	L&G D,GB L	PUZ,TT-Theo ry,VV-Viva	F&S	I	
CO3,CO4	Figure out 12 types of vishama sannipata Ch Su 17/45-61	CK	DK	K	L&G D	M-POS	F&S	I	
CO3,CO4,CO 6	Complement knowledge about kshayalaskhana of dosha-dhatu-mala to the existing understanding (additional important features mentioned in CS)	CK	DK	KH	DIS,F C	TT-Theory,V V-Viva	F&S	I	
CO3,CO4	Interpret dosha-vikalpa (combinations of doshas) in different conditions. Ch.Su. 17/45-61	CAP	MK	KH	IBL,C BL	P-PS,TT-Theo ry,VV-Viva	F&S	I	

CO3,CO7	Complement knowledge of Ojus to the existing understanding (additional important features mentioned in CS) Ch Su 17/73-77	CC	MK	K	DIS,FC	TT-Theory	F&S	I	H-RN
CO3,CO4,CO6	Outline the samprapti of madhumeha and importance of ojus. Ch Su 17/78-81	CAP	MK	KH	L&GD	TT-Theory	F&S	I	
CO2,CO3,CO4,CO7	Define the term “gati” and Classify and explain various kinds of gati. Ch.Su 17/112 - 118 Cakrapani	CK	MK	K	L&GD,RP	TT-Theory,VV-Viva	F&S	I	
CO2,CO4,CO6	Interpret asaya apakarsha-gati in relationship with dosha-gati. Ch.Su. 17/45-46	CC	DK	KH	L&GD	TT-Theory	F&S	I	
CO3,CO4,CO7	Explain kshayahetu Ch.Su. 17/ 76-77	CC	MK	KH	L&GD	TT-Theory,VV-Viva	F&S	I	
CO3,CO4,CO6	Illustrate dosha-gati in clinical conditions	CAP	MK	KH	CBL,D	P-RP,P-CASE	F&S	I	
CO3,CO4	Explain identification of dosha vriddhi, kshaya, samya Ch.Su. 17/ 62	CC	MK	KH	L	CL-PR,TT-Theory,VV-Viva	F&S	I	
CO1	Recite sutras Ch Su 17/12, 41-44, 62, 112-118	CK	MK	K	SDL,REC	P-REC	F&S	I	
CO1	Summarize the chapter as per sutra Ch Su 17/120-121	CK	NK	K	SDL	P-VIVA	F&S	I	
Topic 6 Cha.Su.18-Trisotheeya Adhyaya (Lecture :1 hours, Non lecture: 3 hours)									
CO1,CO2	Justify the position of the chapter in the Samhita and its importance	CC	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	I	
CO2	Explain basic meaning and importance of key terms in the chapter such as trisotha, trividhabodhya sangraha and anukta roga	CC	MK	K	L&PPT	TT-Theory,VV-Viva	F&S	I	
CO5	Name and explain trividha-bodhya-sangraha (three-fold method	CC	MK	K	L&G	TT-Theory,V	F&S	I	

	for understanding disease – vikara prakriti, samuthana and adhisthana) Ca.Su. 18/55, 46-47				D	V-Viva			
CO3,CO6	Illustrate use of trividha-bodhya-sangraha in anuktavyadhi Ch Su 18/44-45	CAP	DK	KH	L&GD,CBL	TT-Theory,VV-Viva	F&S	I	
CO3,CO5	Outline pradesika sotha (local edema) Ch Su 18/19-36	CC	DK	K	L&GD,L_VC	P-ID,TT-Theory,VV-Viva	F&S	I	
CO3,CO6	Explain aparisankhyeyatwa of diseases (innumerability) Ch Su 18/42	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	I	
CO3	Complement tridosha-samanyakarma with additional details mentioned in CS	CC	MK	K	BS,IBL,FC	PRN,TT-Theory,VV-Viva	F&S	I	
CO1	Recite sutras Ch Su 42,43,44-47	CK	MK	K	SDL,REC	P-REC	F&S	I	
CO1	Summarize the chapter as per sutra Ch Su 18/54-56	CK	NK	K	SDL	P-VIVA	F&S	I	
Topic 7 Cha.Su.19-Ashtodareeya Adhyaya (Lecture :1 hours, Non lecture: 3 hours)									
CO1,CO2	Justify the position of the chapter in the Samhita and its importance	CC	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	I	
CO2	Explain basic meaning and importance of key terms in the chapter such as nijavyadhi (intrinsic diseases), samanyaja-vyadhi (general diseases) and sankhyasamprapti (enumeration of types of diseases)	CK	MK	K	L&GD,BS	QZ ,COM,TT-Theory,VV-Viva	F&S	I	
CO2,CO3	Outline the types of diseases (sankhyasamprapti) mentioned in the chapter	CK	DK	K	L&GD,GBL	QZ ,PUZ,TT-Theory,VV-Viva	F&S	I	

CO3,CO4	Illustrate the importance of tridosha in occurrence of diseases Ch Su 19/5	CC	MK	KH	DIS,SDL	TT-Theory,VV-Viva	F&S	I	
CO3,CO4	Explain the relationship between Nija and Agatu rogas (intrinsic and extrinsic diseases) Ch Su 19/6,7	CK	MK	K	L&GD,PL	TT-Theory,VV-Viva	F&S	I	
CO6,CO8	Classify diseases in Ayurveda using available online resources (Activity, ref: activity table)	CAP	DK	KH	DIS,BL	SA,TT-Theory,VV-Viva	F	I	
CO1,CO2	Recite sutras Ch Su 19/5, 6	CK	MK	K	SDL,REC	P-REC	F&S	I	
CO1,CO2	Summarize the chapter as per sutra Ch Su 19/8,9	CK	NK	K	SDL	P-VIVA	F&S	I	
CO3,CO6,CO7	Summarize different classifications of diseases mentioned in deerghanjeeviteeya, tisraishaneeya, ashtodareeya, maharoga and roganeeka	CC	MK	KH	DIS,W	P-POS	F	I	
Topic 8 Cha.Su.20- Maharoga adhyaya (Lecture :2 hours, Non lecture: 2 hours)									
CO1,CO2	Justify the position of the chapter in the Samhita and its importance	CC	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	I	
CO2	Explain basic meaning and importance of key terms such as agantumukha, trividhaprerana, samanyaja-vikara, nanatmaja-vikara and atmarupa	CK	MK	K	L&GD,BS	QZ ,COM,TT-Theory,VV-Viva	F&S	I	
CO3,CO5	Explain the basis for the classification of diseases. Ch.Su. 20/3	CK	MK	K	L&GD,ML	M-CHT,TT-Theory,VV-Viva	F&S	I	
CO5	Define nija and agantuja vyadhi. Ch.Su. 20/7	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	I	
CO5	Describe kaarana for nija and agantuja vyadhi. Ch.Su. 20/4-5	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	I	

CO3,CO5	Enlist nanatmajavyadhi of vata and relate guna, atmarupa, vikritakarma of vata and its upakrama. Ch.Su. 20/12,13	CAP	MK	K	L&GD	M-CHT,VV-Viva	F&S	I	
CO3,CO5	Enlist nanatmajavyadhi of pitta and relate guna, atmarupa, vikritakarma of pitta, and its upakrama Ch.Su. 20/14-16	CAP	MK	K	L&GD	M-CHT,VV-Viva	F&S	I	
CO3,CO5	Enlist nanatmajavyadhi of Kapha and Relate guna, atmarupa, vikritakarma of Kapha and its Upakrama. Ch.Su. 20/17-19	CAP	MK	K	L&GD	M-CHT,VV-Viva	F&S	I	
CO4,CO6,CO8	Make monographs of nanatamaja-vikaras (Activity, see activity list)	CAP	DK	KH	TPW,BL	M-CHT,CR-W	F	I	
CO3,CO6,CO7	Relate paribhasha of different terms in nanatamajavyadhi with descriptions available in Ashatanga sangraha Su 20/18	CC	DK	KH	DIS	T-OBT	F	I	
CO1,CO2	Recite sutras Ch. Su. 20/ 3, 4, 5, 11,14, 17, 20-22	CK	MK	K	SDL,REC	P-REC	F&S	I	
CO1,CO2	Summarize the chapter as per sutra Ch Su 20/ 23-25	CC	NK	K	SDL	P-VIVA	F&S	I	
Topic 9 Cha.Su.21- Ashtauninditeeya adhyaya (Lecture :3 hours, Non lecture: 3 hours)									
CO1,CO2	Justify the position of the chapter in the Samhita and its importance	CC	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	I	
CO2	Explain basic meaning and importance of key terms such as ashtaninditapurusha, ashtadosha of atisthaulya, prasastapuruhsalakshana	CK	MK	K	L&GD,BS	QZ ,COM,TT-Theory,VV-Viva	F&S	I	
CO2	Enlist ashtaninditapurusha Ch Su 21/3	CK	MK	K	L&GD,RP	TT-Theory,VV-Viva	F&S	I	
CO4,CO5	Enlist ashtadosha of atisthoola purusha and justify its ashtadosha Ch.Su. 21/4	CAP	MK	K	L&GD,RP	P-SUR,CL-PR,VV-Viva	F&S	I	
CO4,CO5,CO	Outline the diagnostic features of atisthula. Ch.Su.21/9	CC	MK	K	L&G	TT-Theory,V	F&S	I	

7					D	V-Viva			
CO5,CO6,CO7	Outline hetu and samprapti of atisthaulya Ch.Su. 21/4-8	CAP	DK	K	L&PPT	TT-Theory,VV-Viva	F&S	I	
CO4,CO5	Describe chikistasutra for atisthula purusha and mention different formulations. Ch.Su. 21/20- 28	CAP	MK	K	L&GD	TT-Theory,VV-Viva	F&S	I	
CO5,CO6	Describe hetu, dosha and lakshana for atikrusha purusha. Ch.Su. 21/11-15	CC	MK	K	L&PPT	TT-Theory,VV-Viva	F&S	I	
CO4,CO5	Describe chikistasutra for atikrusha purusha and mention different formulations Ch.Su. 21/20, 29-34	CC	MK	KH	L&GD	TT-Theory,VV-Viva	F&S	I	
CO6	Interpret why atisthula purusha is difficult to treat compared to krushapurusha Ch.Su. 21/16-17	CAP	MK	K	L&GD	TT-Theory,VV-Viva	F&S	I	
CO5	Enlist the features of ideal physique in individuals (prashasta purusha lakshana) Ch.Su. 21/18-19	CC	MK	KH	L&GD	TT-Theory,VV-Viva	F&S	I	
CO4,CO7	Define nidra and enlist its types Ch Su 21/35&58	CK	MK	K	L&PPT	TT-Theory,VV-Viva	F&S	I	
CO3,CO7	Determine significance of nidra as an etiological factor of sthaulya and karsya and its role in management of the same Ca.Su. 21/51	CAP	MK	KH	DIS,CBL,FC	CL-PR	F&S	I	
CO1,CO2	Recite sutras Ch Su 21/ 3,4,16, 18, 19, 35, 50, 58	CK	MK	K	SDL, REC	P-REC	F&S	I	
CO1,CO2	Summarize the chapter as per sutra Ch Su 21/60-62	CC	NK	K	SDL	P-VIVA	F&S	I	
Topic 10 Cha.Su.22- Langhanabrimhaneeya Adhyaya (Lecture :3 hours, Non lecture: 2 hours)									
CO1,CO2	Justify the position of the chapter in the Samhita and its importance	CC	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	I	

CO2	Explain basic meaning and importance of key terms such as shadupakrama and dasavidhalanghana	CK	MK	K	L&GD,BS	QZ ,COM,TT-Theory,VV-Viva	F&S	I	
CO2,CO4,CO5	Enlist and define shadupakrama. Ch.Su. 22/4, 9-12	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	I	
CO2,CO5,CO7	Explain properties of dravyas used in shadupakrama with examples. Ch.Su. 22/12-17	CK	MK	K	L&PPT,PBL	TT-Theory,VV-Viva	F&S	I	
CO4,CO5	Enlist dasavidha-langhana and their indications Ch.Su. 22/19-23	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	I	
CO2,CO4,CO5	Relate gurvadi guna and samanya visesha sidhanta with shadupakrama Ch Su 22/12-17	CK	DK	KH	DIS,FC	T-EMI,VV-Viva	F&S	I	
CO4,CO5	Identify dasavidhalanghana in treatment guidelines mentioned for different diseases	CAP	NK	KH	IBL,CBL	T-OBT,VV-Viva	F&S	I	
CO4,CO5	Explain samyaklakshana of langhana, brimhana and sthambhana Ch Su 22/34,35,38,40	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	I	
CO4,CO5	Outline atiyoga and ayogalakshana of brimhana, langhana and sthambhana Ch Su 22/36-38	CK	DK	K	L&GD,CBL	M-CHT,TT-Theory,VV-Viva	F&S	I	
CO1,CO2	Recite sutras Ch Su 21/9-24	CK	MK	K	SDL, REC	P-REC	F&S	I	
CO1,CO2	Summarize chapter as per sutra Ch Su 22/44	CC	NK	K	SDL	P-VIVA	F&S	I	
Topic 11 Cha.Su.23- Santarpaneeya Adhyaya (Lecture :2 hours, Non lecture: 0 hours)									
CO1,CO2	Justify the position of the chapter in the Samhita and its importance	CC	MK	KH	L&GD	INT,TT-Theory,VV-Viva	F&S	I	

CO2	Explain basic meaning and importance of key terms such as santarpana and apatarpana	CK	MK	K	L&GD,BS	QZ ,COM,TT-Theory,VV-Viva	F&S	I	
CO3,CO5	Enlist santarpanadravya Ch Su 23/3-5	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	I	
CO3	Enlist santarpanajanyavyadhis Ch Su 23/5-7	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	I	
CO3,CO6	Explain chikitsa-sutra for santarpana-janya-roga. Ch.Su. 23/ 8	CAP	MK	K	L&GD	TT-Theory,VV-Viva	F&S	I	
CO3	Explain apatarpanajanya vyadhis Ch Su 23/26-29	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	I	
CO3,CO6	Outline the management approach to apatarpana janya vyadhi Ch Su 23/30-32	CC	MK	KH	L&GD,CBL	TT-Theory,VV-Viva	F&S	I	
CO1,CO2	Recite sutras Ch Su 23/ 5-7, 26-29	CK	MK	K	SDL, REC	P-REC	F&S	I	
CO2	Summarize chapter as per sutra Ch Su 23/40	CC	NK	K	SDL	P-VIVA	F&S	I	
Topic 12 Cha.Su.24- Vidhishoniteeya Adhyaya (Lecture :3 hours, Non lecture: 2 hours)									
CO1,CO2	Justify the position of the chapter in the Samhita and its importance	CC	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	I	
CO2	Explain basic meaning and importance of key terms such as sonitadushti and visuddharakta	CK	MK	K	L&GD,BS	QZ ,COM,TT-Theory,VV-Viva	F&S	I	
CO3,CO4,CO7	Explain causative factors for raktadushti Ch.Su. 24/ 5-10	CK	MK	K	L&GD	CHK	F&S	I	

CO4,CO6	Explain diagnostic criteria of raktadushti. Ca.Su. 24/17	CC	MK	K	L&GD	TT-Theory,VV-Viva	F&S	I	
CO4,CO6,CO7	Enlist rakta-dushtijanya-roga. Ch.Su. 24/11-16, 28/11-13	CC	MK	K	L&GD	TT-Theory,VV-Viva	F&S	I	
CO4,CO5	Explain treatment principles of rakta-dushti. Ch.Su. 24/18**.**	CC	MK	K	L&GD	INT,VV-Viva	F&S	I	
CO3,CO4,CO7	Explain visudha-rakta lakshana Ch Su 23/22	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	I	
CO3,CO4,CO5	Explain visuddha-rakta-purusha lakshana Ch Su 23/24	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	I	
CO3,CO6,CO7	Relate the concept of raktadushti with similar references such as Ch.vi. 5/26	CC	MK	KH	DIS	T-OBT	F	I	
CO4,CO5,CO7	Explain pathya in raktamoksha Ch Su 24/23	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	I	
CO4,CO5,CO6	Summarize the samprapti of mada, murchaya and sanyasa Ch Su 24/25-29	CAP	DK	KH	L&GD,IBL,RP	PUZ,TT-Theory,VV-Viva	F&S	I	
CO1,CO2	Recite sutras Ch Su 24/ 14,18,20,21,22,24	CK	MK	K	SDL,REC	P-REC	F&S	I	
CO2	Summarise the chapter as per sutra Ch Su 24/59-60	CC	NK	K	SDL	TT-Theory,VV-Viva	F&S	I	
Topic 13 Cha.Su.25- Yajjapurusheeya Adhyaya (Lecture :2 hours, Non lecture: 4 hours)									
CO1	Justify the position of the Yajjapurusheeya chapter in the Samhita and its importance	CC	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	I	

CO2	Explain basic meaning and importance of key terms in the chapter such as Hita, Ahita, Pathya and Apathya	CK	MK	K	L&GD,BS	QZ ,COM,TT-Theory,VV-Viva	F&S	I	
CO4,CO7	Justify the role of different factors responsible for formation of purusha Ch Su 25/3-29	CC	DK	KH	L&GD,ML	TT-Theory,VV-Viva	F&S	I	
CO1,CO8	Appreciate importance of sambhasha in bringing out scientific conclusions	AFT-REC	NK	KH	L&GD,RP,PL	SA,TT-Theory,VV-Viva	F&S	I	
CO2,CO3	Differentiate factors related with ahara like Aharayoni, Prabhava, udarka, Upayoga, Rasa, Gurvadi Guna etc Ch Su 25/36	CK	MK	KH	L&GD,LS	T-OBT,TT-Theory,VV-Viva	F&S	I	
CO3,CO4,CO5	Enlist important agryas related with aushadha, anna and vihara Ch Su 25/38-40	CK	DK	K	L&GD,FC,GBL	T-OBT,TT-Theory,VV-Viva	F&S	I	H-DG,H-RN
CO4,CO5,CO7	Define pathya and explain its importance Ch Su 25/45-47	CC	MK	K	L&GD	TT-Theory,VV-Viva	F&S	I	
CO4,CO7,CO8	Justify importance of hitahara and ahitahara (See activity list)	CAP	DK	KH	DIS,FC	INT,TT-Theory,VV-Viva	F&S	I	
CO5	Mention asavayonis Ch Su 25/49	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	I	
CO1,CO2	Recite sutras Ch Su 25/ 29,31,33,45,46,47,50	CK	MK	K	SDL,REC	P-REC	F&S	I	
CO1	Summarize the chapter with shloka number Ch Su 25/51	CK	NK	K	SDL	TT-Theory,VV-Viva	F&S	I	
Topic 14 Cha.Su.26- Atreyabhadrakaapyeeya Adhyaya (Lecture :3 hours, Non lecture: 3 hours)									
CO1,CO2	Justify the position of the chapter in the Samhita and its	CC	MK	K	L&G	INT,TT-Theor	F&S	I	

	importance				D	y,VV-Viva			
CO2	Explain basic meaning and importance of key terms such as dravyaprabhava, gunaprabhava, rasapanchaka and viruddha	CK	MK	K	L&GD,BS	QZ ,COM,TT-Theory,VV-Viva	F&S	I	
CO2,CO3,CO5	Enlist gunas of parthivadi dravyas Ch Su 26/11	CK	DK	K	L&GD	TT-Theory,VV-Viva	F&S	I	
CO4,CO5	Differentiate dravyaprabhava and gunaprabhava with examples Ch Su 26/13	CK	MK	KH	L&GD	PUZ,TT-Theory,VV-Viva	F&S	I	H-DG
CO4,CO5	Explain dravyakarmukata siddhant with examples Ch Su 26/13	CK	MK	KH	L&GD,DA	TT-Theory,VV-Viva	F&S	I	H-DG
CO4,CO5,CO6	Explain the importance of paradi gunas as chikitsopayogi gunas (in diagnosis and treatment). Ch Su 26/29-35 (see activity list, activity no.5)	CK	DK	KH	L&GD,FC,SDL	TT-Theory,VV-Viva	F&S	I	
CO2,CO5	Complement the existing knowledge of ‘rasadi panchaka’ with additions from Charakasamhita.	CK	DK	K	FC,SDL	T-OBT,TT-Theory,VV-Viva	F&S	I	
CO2,CO5	Differentiate the properties of three types of ‘Vipakas’ Ch Su 26/58-63	CK	MK	K	DIS,FC	TT-Theory,VV-Viva	F&S	I	
CO4,CO5	Explain method of perception of rasa,veerya and vipaka of dravyas Ch Su 26/66	CC	MK	KH	L&GD,D	DEB,TT-Theory,VV-Viva	F&S	I	H-DG
CO2,CO4,CO5	Enlist the examples of prabhava Ch Su 26/68-70	CK	MK	K	L&GD,EDU,SDL	TT-Theory,VV-Viva	F&S	I	H-DG
CO4,CO5,CO7	Enlist the types of viruddhaahara and principles of management of diseases caused by viruddhaahara. Ch Su 26/86, 104-105	CK	MK	K	L&GD,BL,	P-PS,TT-Theory,VV-Viva	F&S	II	

					RLE				
CO4,CO5	Illustrate vichitra-pratyayarabdha with examples Ch Su 26/48-52	CAP	MK	KH	DIS,IBL	P-ID,TT-Theory,VV-Viva	F&S	II	
CO1,CO2	Recite the shlokas Ch Su 26/13,36,37,61,62,66,81,85	CK	MK	K	SDL,REC	P-REC	F&S	II	
CO4,CO5	Relate different sidhantas on dravya mentioned in Ch.Su1, Ch Su 4, Ch Su 27 and Ch Vi 1	CC	MK	KH	DIS,FC	CL-PR	F	I	
CO1,CO2	Summarize the chapter as per sutra Ch Su 26/107-113	CK	NK	K	SDL	TT-Theory,VV-Viva	F&S	II	
Topic 15 Cha.Su.27- Annapaana vidhi Adhyaya (Lecture :4 hours, Non lecture: 2 hours)									
CO1,CO2	Justify the position of the chapter in the Samhita and its importance	CK	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	I	
CO2,CO5,CO7	Enlist the characteristics of hitahara and examples of hitaahara and ahitaahara. Ch Vi 27/3	CK	MK	K	SDL	P-VIVA	F&S	I	
CO2,CO5,CO7	Classify ahara into different vargas Ch Su 27/26	CK	MK	K	FC,SDL	P-VIVA	F&S	I	
CO4,CO5,CO7	Illustrate ahara-dravya through exhibition (See activity list, activity no.7)	CS	DK	SH	PrBL,RLE	Log book,TR	F	I	
CO1,CO2	Summarise the chapter as per Ch Su 27/351-352	CC	NK	K	SDL	TT-Theory,VV-Viva	F&S	I	
Topic 16 Cha.Su.28- Vividhashitapeeteeya Adhyaya (Lecture :4 hours, Non lecture: 14 hours)									
CO1,CO2	Justify the position of the chapter in the Samhita and its importance	CC	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	I	
CO2	Explain basic meaning of key terms in the chapter such as	CK	MK	K	L&G	QZ ,COM,TT-	F&S	I	

	chaturvidha ahara, vyadhisaha sareera, dhatu-upadhatu-mala-indriya-pradoshajavyadhi				D,BS	Theory,VV-Viva			
CO2,CO7	Enlist the four types of aahara Ch Su 28/3	CK	MK	K	L&GD,ML	M-CHT,VV-Viva	F&S	I	
CO2,CO7	Explain factors influencing susceptibility to diseases which modify the effects of pathya and apathya Ch Su 27/7	CK	MK	KH	L&GD,SDL	TT-Theory,VV-Viva	F&S	I	
CO3,CO7	Enlist the vyadhi- asaha shareera Ch Su 27/7	CK	MK	KH	L&GD,IBL	TT-Theory,VV-Viva	F&S	I	
CO3,CO4,CO5,CO7	Outline dhatu-upadhatu-mala-indriya pradoshaja vyadhi (diseases caused by doshas situated in different dhatus, upadhatus, malas and indriyas) explain their treatment principles Ch Su 27/9-30	CC	MK	KH	L&GD,IBL,LS	T-OBT,M-CHT,TT-Theory,VV-Viva	F&S	I	
CO3,CO4,CO7	Explain mechanism koshtagati and sakhagati Ch Su 27/31-33	CC	MK	KH	L&GD,FC	TT-Theory,VV-Viva	F&S	I	
CO3,CO7	Emphasize the role of Prajnaparadha in causation of diseases Ch Su 27/39-40	CC	MK	KH	L&GD	TT-Theory,VV-Viva	F&S	I	
CO1,CO2	Recite sutras Ch Su 27/9-19,35-39, 45	CK	MK	K	SDL,REC	P-REC	F&S	I	
CO1,CO2	Summarize the chapter as per Ch Su 28/45-48	CK	NK	K	SDL	T-OBT,TT-Theory,VV-Viva	F&S	I	
CO3,CO6	Relate dhatupradoshaja vyadhi with explanations in other contexts such as Ch.vi. 5/ 10-22, Ch.Su. 28/ 09- 19, Ch.Vi. 5/8 and dhatugatha avastha described in Ashtangasangraha Sutasthana	CC	DK	KH	DIS,BS	CL-PR	F	I	

Topic 17 Cha.Su.29- Dashapraanaayataneeya Adhyaya (Lecture :2 hours, Non lecture: 2 hours)									
CO1,CO2	Justify the position of the chapter in the Samhita and its importance	CC	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	II	
CO2	Explain basic meaning and importance of key terms such as pranaayatan, praanabhisara, rogaabhisara, chadmachara, yogya chikitsak, karma kovidah.	CK	MK	K	L&GD,BS	QZ ,COM,TT-Theory,VV-Viva	F&S	II	
CO2,CO3,CO7	Enlist dasha praanayatanas. Ch Su 29/3,4	CC	MK	KH	L&GD	TT-Theory,VV-Viva	F&S	II	
CO8	Enlist two types of bhishak. Ch Su 29/5	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	II	
CO8	Explain the qualities of pranaabhisar, rogabhisara and bhishakchadmacahara Ch Su 29/7	CC	MK	KH	L&GD	TT-Theory,VV-Viva	F&S	II	
CO8	Appreciate the social hazards caused due to quackery	AFT-REC	DK	KH	BS,SDL	CR-W,VV-Viva	F&S	II	
CO8	Enlist qualities of yogya chikitsak Ch Su 29/ 13.	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	II	
CO8	Illustrate characteristics of different types of vaidya through skit (see activity no.8)	PSY-SET	DK	SH	RP,FV	PRN	F	II	
CO1,CO2	Recite sutras Ch Su 29/3,4,13.	CK	MK	K	SDL,REC	P-REC	F&S	II	
CO1,CO2	Summarize the chapter as per sutra Ch. Su 29/14	CK	MK	K	SDL	T-OBT,TT-Theory,VV-Viva	F&S	II	
CO8	Relate different references related to good qualities of Vaidya from different chapters Ch Su 11/50-53	CC	MK	KH	FC	CL-PR,DEB	F	II	

Topic 18 Cha.Su.30- Arthedashamahamooleeya Adhyaya (Lecture :2 hours, Non lecture: 0 hours)									
CO1,CO2	Justify the position of the chapter in the Samhita and its importance	CK	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	II	
CO2	Explain basic meaning and importance of key terms such as artha, mahamula, mahaphala, shashwatatva	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	II	
CO3,CO4,CO7	Explain the importance of hrudaya. Ch Su 30/3,4,5,6,7	CC	MK	KH	L&GD	TT-Theory,VV-Viva	F&S	II	
CO3,CO7	Relate concept of hridaya with details given in trimarmeeya, sareerasthana etc.	CK	MK	KH	L&GD,FC	T-OBT	F	II	
CO3,CO4,CO7	Explain the importance of ojas and its sthana Ch Su 30/8-12.	CC	MK	KH	L&GD	TT-Theory,VV-Viva	F&S	II	
CO3,CO4,CO7	Define terms dhamani, srotas, sira. Ch Su 30/12	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	II	
CO3,CO4,CO7	Explain shresthatama bhava Ch Su 30/15	CK	NK	K	L&GD	TT-Theory,VV-Viva	F&S	II	
CO3,CO5,CO8	Explain Ayurvedavid lakshana and their method of understanding in the form of vakyashah, vakyarthashah, arthavayavashah Ch Su 30/16	CK	DK	KH	L&GD	TT-Theory,VV-Viva	F&S	II	
CO3,CO4,CO7	Outline lakshana of sukhayu, asukhayu, hitayu and ahitayu Ch Su 30/24, 25	CK	DK	KH	L&GD,IBL	PUZ,TT-Theory,VV-Viva	F&S	II	
CO3,CO4	Define objective (prayojana) of Ayurveda Ch Su 30/26	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	II	
CO3,CO5,CO8	Appreciate eternity of Ayurveda Ch Su 30/27	CC	MK	KH	L&GD,BS	TT-Theory,VV-Viva	F&S	II	

CO3,CO4,CO7,CO8	Explain qualities of learner of Ayurveda and their objectives. Ch Su 30/29	CC	DK	K	L&GD	TT-Theory,VV-Viva	F&S	II	
CO3,CO4,CO7	Enlist dashaprakaran of tantraartha. Ch Su 30/32.	CK	MK	KH	L,L&GD	P-VIVA,TT-Theory,VV-Viva	F&S	II	
CO3,CO4	Outline the ashtasthanas of Charaka Samhita Ch Su 30/32	CK	MK	K	L&GD	TT-Theory,PP-Practical,VV-Viva	F&S	II	
CO3,CO4,CO6	Enlist paryayas of Ayurveda. Ch Su 30/31	CK	MK	K	L&GD	TT-Theory,PP-Practical,VV-Viva	F&S	II	
CO4,CO5	Explain characteristics of pallavagrahi bhishak or consequences of incomplete knowledge with examples Ch Su 30/72-81.	CK	DK	K	L&GD	TT-Theory,PP-Practical,VV-Viva	F&S	II	
CO3,CO5,CO8	Appreciate importance of Shastra jnana Ch Su 30/84-85	AFT-VAL	DK	KH	L&GD,BS	VV-Viva	F&S	II	
CO1,CO2	Explain importance of sangraha adhyayas	CC	DK	K	BL,SDL	VV-Viva	F&S	II	
CO1,CO2	Recite sutras Ch Su 30/3,410,11,12.	CK	MK	K	SDL,REC	P-REC	F&S	II	
CO1,CO2	Summarize the chapter as per sutras Ch Su 30/86-87	CK	NK	K	SDL	T-OBT,VV-Viva	F&S	II	
Topic 19 Cha.Ni.01-Jwara nidana Adhyaya (Lecture :2 hours, Non lecture: 2 hours)									
CO1	Describe the sthana adhikarana (objectives) of Nidanasthana Ch.Ni.1/15	CK	MK	K	L	P-VIVA,TT-Theory	F	II	

CO1	Justify the position of the chapter in the samhita and its importance	CK	MK	K	L	T-EMI	F	II	
CO2	Explain basic meaning and importance of key terms such as nidanapanchaka and jwara	CK	MK	K	L&GD,BS	QZ ,COM,TT-Theory,VV-Viva	F&S	II	
CO4,CO6,CO7	Explain nidanapanchaka with suitable examples. Ch.Ni.1/6-13	CK	MK	KH	L&GD,FC	P-VIVA,TT-Theory	F&S	II	
CO4,CO6	Differentiate vyadhibodhaka nidana and vyadhi janaka nidana Ch Ni 1/1 Cakrapani commentary	CAN	DK	KH	L&GD,TBL	VV-Viva	F	II	
CO2,CO4,CO6	Enlist synonyms of nidana (causative factors) and roga (disease) Ch Ni 1/3,5	CK	MK	KH	L	TT-Theory,VV-Viva	F&S	II	
CO4,CO6	Explain the importance of nidanapanchaka Ch.Ni 1/13	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	II	
CO6	Explain nidanapanchaka and elaborate nidana (causative factor), purvarupa (premonitory symptoms) lakshana/rupa (symptoms)	CK	MK	KH	L&GD	T- EW	F	II	
CO4,CO6,CO7	Describe upashaya along with its types in detail Ch Ni 1/10	CC	MK	SH	L&GD,BS	TT-Theory,VV-Viva	F&S	II	
CO4,CO6	Interpret the classification of samprapti (pathogenesis) Ch Ni 1/12	CK	MK	KH	L&PPT,CBL	TT-Theory,VV-Viva	F&S	II	
CO4,CO6	Diffrentiate the samanya and vishesha samprapti of disease	CAP	MK	SH	L_VC,DIS	TT-Theory,VV-Viva	F&S	II	
CO3,CO4	Describe the vishesha nidana (specific factors of diseases) prakopa karana (causes of aggravation),samprapti (pathogenesis)	CAP	MK	KH	L&GD	TT-Theory,VV-Viva	F	II	

	and lakshana (symptoms) of jwara (fever)								
CO3,CO6	Outline vataja, pittaja, kaphaja, samsarga and sannipataja jwara Ch Ni 1/19-30	CC	MK	KH	L&GD,CBL	TT-Theory,VV-Viva	F&S	II	
CO3,CO4,CO6	Describe agantuja jwara nidana (causes factor of exogenous fever) Ch Ni 1/30,31	CK	MK	KH	L	TT-Theory,VV-Viva	F&S	II	
CO2,CO4,CO5	Differentiate nava and jeerna jwara chikitsa sutra (line of treatment) Ch Ni 1/36	CK	MK	K	L,L&GD	TT-Theory,VV-Viva	F&S	II	
CO1,CO2	Recite sutras Ch Ni/3,5,7-11,38-40	CK	MK	K	SDL,REC	P-REC	F	II	
CO1,CO2	Summarize the chapter as per sutras given at the end of the chapter Ch Ni 1/42-44	CK	NK	K	SDL	T-OBT	F&S	II	
Topic 20 Cha.Ni.02-Raktapitta nidana Adhyaya (Lecture :2 hours, Non lecture: 2 hours)									
CO1,CO2	Justify the position of the chapter in the Samhita	CC	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	II	
CO2	Explain basic meaning and importance of key terms such as pratimargaharana, sadhyasadhyata, raktapitta	CK	MK	KH	L&GD,BS	QZ ,COM,TT-Theory,VV-Viva	F&S	II	
CO2,CO4,CO6	Justify raktapitta paryaya and nirukti Ch Ni 2/5	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	II	
CO2,CO4,CO6	Outline raktapitta nidana and samprapti (etiology and pathogenesis of raktapitta)	CC	DK	KH	L&GD	TT-Theory,VV-Viva	F&S	II	
CO3,CO4,CO6	Define raktapitta and outline raktapitta purvarupa (premonitory features of raktapitta) upadrava (complication of raktapitta) Ch Ni 2/6,7	CC	MK	KH	L&GD	TT-Theory,VV-Viva	F&S	II	

CO4,CO6	Relate concept of trividha gati (adha, urdhwa, tiryag) with samprapti of raktapitta Ch Ni 2/8	CAP	DK	KH	L&GD	T-EMI,TT-Theory,VV-Viva	F&S	II	
CO4,CO5,CO7	Explain concept of pratimargaharana in the context of raktapitta Ch Ni 2/9	CAP	MK	KH	L&GD,LS	TT-Theory,VV-Viva	F&S	II	
CO4,CO6	Illustrate sadhyasadhyata of raktapitta Ch Ni 2/9,12-20	CAP	MK	KH	L&GD,PL	TT-Theory,VV-Viva	F&S	II	
CO4,CO6	Outline asadhya lakshana of raktapitta (features of incurable disease) Ch Ni 2/23-26	CC	DK	KH	L&GD	TT-Theory,VV-Viva	F&S	II	
CO1,CO2	Recite sutras Ch Ni/19,27	CK	MK	K	SDL,REC	P-REC	F&S	II	
CO2	Summarize the chapter as per sutra Ch Ni 2/28,29	CK	NK	K	SDL	T-OBT	F&S	II	
Topic 21 Cha.Ni.03-Gulma nidana Adhyaya (Lecture :2 hours, Non lecture: 2 hours)									
CO1,CO2	Justify the position of the chapter in the Samhita	CC	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	II	
CO2	Explain basic meaning and importance of key terms such as gulma, panchagulma and raktagulma	CK	MK	K	L&GD,BS	QZ ,COM,TT-Theory,VV-Viva	F&S	II	
CO2,CO4,CO6	Demonstrate the prakruti samasamveta and vikruti vishama samaveta siddhanta in the context of gunma Ch.Ni 3/6	CAP	DK	KH	L&GD,IBL	INT,TT-Theory,VV-Viva	F	II	
CO3,CO6	Mention the importance of gulmasthana in samprapti Ch Ni 3/7	CC	MK	K	L&GD	TT-Theory,VV-Viva	F&S	II	
CO3,CO6	Outline the features of vataja-pittaja-kaphaja and raktaja gulma along with samprapti lakshana (pathogenesis and clinical features) Ch Ni 3/6-11	CC	DK	KH	L&GD	TT-Theory,VV-Viva	F&S	II	

CO3,CO6	Describe raktaja gulma samprapti, lakshana (pathogenesis and clinical features) Ch Ni 3/13-14	CC	MK	K	L&GD	TT-Theory,VV-Viva	F&S	II	
CO4,CO6	Outline poorvarupa of gulma Ch Ni 3/15	CC	DK	KH	L&GD	TT-Theory,VV-Viva	F&S	II	
CO4,CO5	Outline treatment principle of gulma Ch Ni 2/16,17	CAP	MK	KH	L&GD	TT-Theory,VV-Viva	F&S	II	
CO1,CO2	Summarise the chapter as per sutra Ch Ni 3/18	CK	NK	K	SDL	T-OBT	F&S	II	
Topic 22 Cha.Ni.04-Prameha nidana adhyaya (Lecture :2 hours, Non lecture: 3 hours)									
CO1,CO2	Justify the position of the chapter in the Samhita and its importance	CC	MK	KH	L&GD	INT,TT-Theory,VV-Viva	F&S	II	
CO2	Explain basic meaning and importance of key terms such as kleda, vikaravighatakara bhava	CK	MK	KH	L&GD,BS	TT-Theory,VV-Viva	F&S	II	
CO3,CO4,CO6	Describe the concept of kleda and its role in samprapti of prameha Ch Ni 4/6-8	CC	DK	KH	L&GD,CBL	TT-Theory,VV-Viva	F&S	II	H-RN
CO4,CO6,CO7	Summarise the sankhyasamprapti of prameha Ch Ni 4/11,25,39	CK	MK	K	L	TT-Theory,VV-Viva	F&S	II	
CO2,CO3,CO6	Enlist causative factors and samprapi ghatakas in prameha Ch Ni 4/7	CK	MK	K	L&GD,CBL	TT-Theory,VV-Viva	F&S	II	
CO2,CO3,CO6	Explore the sootra ‘eha khalu nidan-dosha-dooshya vishesahebhyo…..’ in the manifestation of diseases Ch Ni 4/4	CAP	MK	KH	L&GD,BS,CBL	TT-Theory,VV-Viva	F&S	II	
CO2,CO3,CO6	Relate nidana, dosha, dushya and samprapti of vataja, pittaja and kaphaja prameha Ch Ni 4/5,8,24,36,37	CC	MK	KH	L&GD,CB	TT-Theory,VV-Viva	F&S	II	

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CO2,CO3,CO6	Justify the role of samprapti ghatakas in diagnosed cases of prameha	PSY-SET	NK	SH	L&GD,CBL,D_BED	P-PS,TT-Theory,VV-Viva	F&S	II	H-RN
CO2,CO4,CO5	Outline the chikitsas sutra of prameha Ch Ni 4/49	CC	DK	KH	L&GD,CBL	TT-Theory,VV-Viva	F&S	II	H-RN
CO4,CO6	Explain sadhyasadhyata of prameha Ch Ni 4/11,27,38	CC	MK	K	L&GD	TT-Theory,VV-Viva	F&S	II	
CO4,CO6	Describe purvarupa and upadrava of prameha Ch Ni 4/47,48	CC	MK	K	L_VC,CBL	TT-Theory,VV-Viva	F&S	II	H-RN
CO3,CO7	Relate predisopsing factors of prameha with present day lifestyle	CAP	DK	KH	DIS,FC	VV-Viva	F&S	II	
CO1,CO2	Recite sutras Ch Ni 4/3,4,48,49	CK	MK	K	SDL,REC	P-REC	F&S	II	
CO1,CO2	Summarise the chapter as per sutra Ch Ni 4/53-55	CK	NK	K	SDL	T-OBT	F&S	II	
Topic 23 Cha.Ni.05-Kushta nidana Adhyaya (Lecture :2 hours, Non lecture: 4 hours)									
CO1,CO2	Justify the position of the chapter in the Samhita and its importance	CC	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	II	
CO2	Explain basic meaning and importance of key terms such as saptadravya, saptakushta	CK	MK	K	L&GD,BS	QZ ,COM,TT-Theory,VV-Viva	F&S	II	
CO4,CO6,CO7	Enlist and explain saptadravya of kushta Ch Ni 5/3	CC	MK	KH	L&GD,CB	TT-Theory,VV-Viva	F&S	II	

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CO2,CO3,CO6	Explain the role of ‘kleda’ in the manifestation of kushta Ch Ni 5/3	CC	DK	KH	L&GD,CBL	TT-Theory,VV-Viva	F&S	II	H-RN
CO2,CO3,CO6	Outline anekarupa of kushta (multiplicity) based on vedana, varna, samsthana and prabhava Ch Ni 5/4	CC	DK	KH	L_VC,CBL	TT-Theory,VV-Viva	F&S	II	H-RN
CO2,CO3,CO6	Enlist saptakushta with their dosha predominance Ch Ni 5/5	CK	MK	K	L&GD,BL	TT-Theory,VV-Viva	F&S	II	
CO2,CO4,CO6	Outline samanyanidana of kushta Ch Ni 5/6	CC	DK	KH	L&GD,CBL	TT-Theory,VV-Viva	F&S	II	
CO4,CO6	Enlist purvarupa of kushta Ch Ni 5/7	CC	MK	KH	L&GD,CBL	TT-Theory,VV-Viva	F&S	II	H-RN
CO4,CO6	Outline upadrava of kushta Ch Ni 5/11	CC	DK	KH	L&GD,CBL	TT-Theory,VV-Viva	F&S	II	
CO2,CO3,CO6	Explain sadhyasadhyata of kushta Ch Ni 5/9	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	II	
CO1,CO2	Recite sutras Ch Ni 5/3,5	CK	MK	K	SDL,REC	P-REC	F&S	II	
CO1,CO2	Summarise the chapter as per sutra Ch Ni 5/16	CK	NK	K	SDL	T-OBT	F&S	II	
Topic 24 Cha.Ni.06-Shosha nidana Adhyaya (Lecture :2 hours, Non lecture: 2 hours)									
CO1,CO2	Justify the position of the chapter in the Samhita and its importance	CC	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	II	

CO2	Explain basic meaning and importance of key terms such as chaturvidha ayatana and ekadasarupa	CK	MK	K	L&GD,BS	QZ ,COM,TT-Theory,VV-Viva	F&S	II	
CO2,CO3,CO6	Explain role of four aetiological factors (chaturvidha-ayatana) in samprapti of shosha. Ch Ni 6/4,6,7(1),8,10	CC	MK	KH	L&PPT,CBL	TT-Theory,VV-Viva	F&S	II	
CO2,CO3,CO6	Enlist ekadasarupa of shosha Ch Ni 6/14	CK	MK	K	L&GD,ML	TT-Theory,VV-Viva	F&S	II	
CO2,CO3,CO6	Outline the purvarupa of sosha Ch Ni 6/13	CC	DK	KH	L&GD	TT-Theory,VV-Viva	F&S	II	
CO2,CO3,CO6	Explain sadhyasadhyata of shosha Ch Ni 6/15,16	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	II	
CO4,CO6,CO7	Relate concept of dharaneeya adharaneeya vega to the context of shosha nidana	CAP	MK	KH	DIS	CL-PR	F	II	
CO3,CO4,CO7	Justify the importance of ashtaahara vidhi visesha ayatana in the context of prevention of shosha	CAP	MK	KH	DIS,FC	CL-PR	F	II	
CO1,CO2	Recite sutras Ch Ni 6/3,5,7,9,11,14	CK	MK	K	SDL, REC	P-REC	F&S	II	
CO1,CO2	Summarise the chapter as per sutra Ch 6/17	CK	NK	K	SDL	T-OBT	F&S	II	
Topic 25 Cha.Ni.07-Unmada nidana Adhyaya (Lecture :2 hours, Non lecture: 4 hours)									
CO1,CO2	Justify the position of the chapter in the Samhita and its importance`	CC	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	II	
CO2	Explain basic meaning and importance of key terms such as ashtavibhrama, doshonmada and bhutonmada	CK	MK	K	L&GD,BS	QZ ,COM,TT-Theory,VV-Viva	F&S	II	

CO2,CO3,CO6	Define unmada and enlist ashtavibhrama Ch N 7/5	CK	MK	K	L&GD	QZ ,TT-Theory,VV-Viva	F&S	II	
CO2,CO3,CO6	Illustrate ashtavibhrama in different types of unmada	CAP	NK	KH	L_VC,CBL	TT-Theory,VV-Viva	F	II	
CO4,CO6,CO7	Explain sankhyasamprapti of unmada Ch Ni 7/3	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	II	
CO4,CO6,CO7	Interpret unmada abhimukha karana (predisposing factors for unmada) in the contemporary scenario Ch Ni 7/3-4	CC	DK	KH	L_VC,CBL	TT-Theory,VV-Viva	F&S	II	
CO2,CO3,CO6	Interpret the role of prajnaparadha as an important etiological factor in the background of unmada Ca.Ni. 7/19-22	CC	DK	KH	L&GD,L_VC	CR-RED,TT-Theory,VV-Viva	F&S	II	
CO4,CO6,CO7	Summarise different descriptions of concept of prajnaparadha as aetiological factor Ch Su 8, 11, Ch Vi Ch Sa 1, Ch Vi 3	CC	MK	KH	DIS,FC	PRN	F	II	
CO2,CO3,CO6	Outline the purvarupa of unmada Ch Ni 7/6	CC	DK	K	L_VC,CBL	TT-Theory,VV-Viva	F&S	II	
CO2,CO4,CO5	Explain chikitsasutra of unmada Ch Ni 7/8,9	CC	MK	K	L&GD	TT-Theory,VV-Viva	F&S	II	
CO2,CO3,CO4,CO6	Differentiate doshonamda and bhutonmada Ch Ni 7/10-11	CC	DK	KH	L&PPT	TT-Theory,VV-Viva	F&S	II	
CO2,CO3,CO6	Summarize causes, features purpose (prayojana) and treatment of agantu unmada Ch Ni 7/12-17	CK	DK	K	L&PPT	TT-Theory,VV-Viva	F&S	II	
CO1,CO2	Recite sutras Ch Ni 7/ 3,5,19-22	CK	MK	K	SDL,REC	P-REC	F&S	II	
CO1,CO2	Summarise the chapter based on Sutra Ch Ni 7/24	CK	NK	K	SDL	T-OBT	F&S	II	

Topic 26 Cha.Ni.08-Apasmara nidana adhyaya (Lecture :2 hours, Non lecture: 4 hours)									
CO1,CO2	Justify the position of the chapter in the Samhita and its importance	CC	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	II	
CO2	Explain basic meaning and importance of key terms such as nidanarthakara roga, vyadhisankara, tiryaggata dosha	CK	MK	K	L&GD,BS	QZ ,COM,TT-Theory,VV-Viva	F&S	II	
CO2,CO4,CO6	Define apasmara Ch Ni 8/5	CK	MK	K	L,L&PPT	TT-Theory,VV-Viva	F&S	II	
CO2,CO4,CO6	Explain apasmaraabhimukhakarana (predisposing factors of apasmara) Ch Ni 8/4	CK	MK	KH	L&GD,CBL	TT-Theory,VV-Viva	F&S	II	
CO2,CO4,CO6	Outline visesha-lakshana of apasmara Ch Vi 8/8	CC	DK	KH	L&GD	TT-Theory,VV-Viva	F&S	II	
CO2,CO4,CO6	Explain cikitsasutra of apasmara Ch Ni 8/10	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	II	
CO2,CO4,CO6	Explain nidanarthakara roga Ch Ni 8/16-19	CC	MK	KH	L&GD,L_VC,CBL	TT-Theory,VV-Viva	F&S	II	
CO2,CO4,CO6	Explain vyadhisankara Ch Ni 8/21-22	CC	MK	KH	L&PPT,L_VC,CBL	TT-Theory,VV-Viva	F&S	II	H-RN
CO2,CO4,CO5	Differentiate sudha and asuddha chikitsa Ch Ni 8/23	CC	MK	KH	L&GD,BS,CBL	TT-Theory,VV-Viva	F&S	II	

CO2,CO4,CO6	Define and relate different types of sadhyasadhyata Ch Ni 8/33-35	CC	MK	KH	DIS,PBL,CBL,PER	TT-Theory,VV-Viva	F&S	II	H-RN
CO2,CO4,CO5	Describe tiryaggatadosha - cikitsasutra Ch Ni 8/36-39	CK	MK	K	L&GD	TT-Theory	F&S	II	
CO6,CO8	Document experiences of physicians on nidanarthakara roga (Activity no.9)	PSY-SET	DK	KH	DIS,TPW	C-INT	F	II	
CO4,CO6,CO7	Summarise the information gathered from Nidanasthana through Quiz (activity no.10)	CAP	DK	KH	FC,D	QZ	F	II	
CO1,CO2	Recite sutras Ch Ni 8/3, 5, 16-22, 33-35,36-39	CK	MK	K	SDL,REC	P-REC	F&S	II	
CO1,CO2	Summarise the chapter based on sutra 42-44	CK	NK	K	SDL	T-OBT	F&S	II	
Topic 27 Cha.Vi.01- Rasa vimana Adhyayam (Lecture :2 hours, Non lecture: 3 hours)									
CO1,CO2	Explain sthana adhikarana of (objectives) of Vimanasthana Ch Vi 1/3	CK	MK	K	L&GD,LS	CR-W,TT-Theory,VV-Viva	F&S	III	
CO1,CO2	Justify the position of the chapter in the Samhita and its importance	CC	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	III	
CO2,CO4	Explain basic meaning and importance of key terms such as prakritisama samaveta, vikirti vishama samaveta, ahara vidhi visesha ayatana, satmya	CK	MK	K	DIS,PrBL	TT-Theory,VV-Viva	F&S	III	
CO2,CO4	Explain the prakrutisamasamavet and vikrutivishamasamavet siddhanta with suitable examples. Ch Vi 1/9,10	CK	MK	KH	L&GD	TT-Theory,VV-Viva	F&S	III	H-DG
CO2,CO4,CO5	Explain chaturvidha prabhava(rasa-dravya-dosh-vikara prabhava) with examples Ch Vi 1/12	CK	MK	KH	L&GD	TT-Theory,VV-Viva	F&S	III	H-DG

CO2,CO4	Describe the dravyaprabhava in taila,ghrita and madhu with the help of 'samanya vishesha siddhanta' Ch Vi 1/14	CC	MK	KH	L&GD,BL	DEB,TT-Theory,VV-Viva	F&S	III	
CO2,CO5,CO7	Explain the dravyas which should be avoided for regular consumption Ch Vi 1/15-19	CC	MK	KH	L&GD,RLE	M-CHT,TT-Theory,VV-Viva	F&S	III	
CO2,CO4,CO7	Explain satmya and its types Ch Vi 1/20	CC	MK	KH	L&GD,BS	TT-Theory,VV-Viva	F&S	III	
CO2,CO7	Summarize ashta aharavidhivisheshayatana and its role in preservation of health. Ch Vi 1/20-23	CK	MK	K	L&GD,PSM	DEB,TT-Theory,VV-Viva	F&S	III	H-SW
CO2,CO4,CO7	Relate concept of satmya with satmyapareeksha Ch.Vi 8	CC	MK	KH	DIS	CL-PR	F	III	
CO2,CO7	Explain aharavidhi vidhana and bhojya sadgunya Ch Vi 1/24,25	CC	MK	KH	L&GD	TT-Theory,VV-Viva	F&S	III	H-SW
CO3,CO7	Appreciate the importance of popularizing importance of dietary rules (see activity list)	CAP	DK	KH	PrBL	Log book	F	III	
CO4,CO5	Differentiate and apply samanagunadravya and samanagunabhuyishtadravya Ca Vi 1/7	CAP	NK	KH	DIS	CL-PR	F	III	
CO1,CO2	Recite sutras Ch Vi 1/9,10,20,24	CK	MK	K	SDL,REC	P-VIVA,TT-Theory	F&S	III	
CO1,CO2	Summarize the chapter based on sutra Ch Vi 1/27,28	CK	NK	K	SDL	T-OBT,VV-Viva	F&S	III	
Topic 28 Cha.Vi.02-Trividha kuksheeya Adhyayam (Lecture :2 hours, Non lecture: 0 hours)									
CO1,CO2	Justify the position of the chapter in the Samhita and its importance	CC	MK	KH	L&GD	INT,TT-Theory,VV-Viva	F&S	III	

CO2	Explain basic meaning of key terms such as trividha kukshi, matra-amatra ahara, amadosha, amavisha	CK	MK	K	L&GD,BS	QZ ,COM,TT-Theory,VV-Viva	F&S	III	
CO2,CO4,CO7	Explain aharamatra based on trividha kukshi Ch Vi 2/3	CC	MK	KH	L&GD,IBL	C-INT,TT-Theory,VV-Viva	F&S	III	
CO2,CO7	Explain the matravat ahara (ideal quantity of food) and amatravatwa of ahara with its types Ch Vi 2/6	CC	MK	KH	L&GD	TT-Theory,VV-Viva	F&S	III	
CO4,CO7	Justify effects of heenamatra and atimatra ahara Ch Vi 2/7	CAP	MK	KH	L&GD,PBL,FC	TT-Theory,VV-Viva	F&S	III	
CO2,CO7	Enlist and explain the mental factors affecting digestion of food Ch Vi 2/8	CC	MK	KH	L_VC,EDU	TT-Theory,VV-Viva	F&S	III	
CO4,CO5	Outline hetu, linga and aushadha of two types of amadosha Ch Vi 2/10-13	CC	MK	KH	L&PPT,CBL,PER	TT-Theory,VV-Viva	F&S	III	
CO2,CO7	Explain the concept of amavisha Ch Vi 2/12	CC	MK	KH	L&GD,CBL	TT-Theory,VV-Viva	F&S	III	
CO2,CO3,CO4	Define amasaya with reference to its position Ch Vi 2/17	CK	MK	K	L&GD,D-M	TT-Theory,VV-Viva	F&S	III	
CO1,CO2	Recite sutras Ch Vi 2/9	CK	MK	K	SDL,REC	P-REC,TT-Theory	F&S	III	
CO2	Summarize the chapter based on sutra Ch Vi 2/19	CK	NK	K	SDL	T-OBT,VV-Viva	F&S	III	

Topic 29 Cha.Vi.03-Janapadodhwansaneeya Vimanam Adhyaya (Lecture :2 hours, Non lecture: 2 hours)									
CO1,CO2	Justify the position of the chapter in the Samhita and its importance	CC	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	III	
CO2	Explain basic meaning and importance of key terms like janapadodhwamsa, daiva and purushakara	CK	MK	K	L&GD,BS	QZ ,COM,TT-Theory,VV-Viva	F&S	III	
CO2,CO5	Justify the importance of timely collection of medicines Ch Vi 3/4	CAP	DK	K	L&GD,BS	TT-Theory,VV-Viva	F&S	III	
CO2,CO7	Enlist the commomn causes of janapadodhwamsa Ch Vi 3/6	CC	MK	KH	L&GD,BS,FC	TT-Theory,VV-Viva	F&S	III	
CO2,CO7	Describe the lakshanas of dushti of vayu, jala, desha and kala. Ch Vi 3/7	CC	MK	KH	L_VC,PBL,RP	TT-Theory,VV-Viva	F&S	III	
CO4,CO7	Interpret janapadodhvamsa in contemporary epidemiology (see also activity list)	CAP	NK	KH	DIS,BS,PBL,FV	Log book,VV-Viva	F&S	III	
CO2,CO5	Summarize the treatment principles of janapadodhwamsakara vikaras Ch Vi 3/12-18	CK	MK	KH	L&GD	TT-Theory,VV-Viva	F&S	III	
CO2,CO7	Explain the role of adharma in janapadodhwamsa Ch Vi 3/20	CC	MK	KH	DIS,BS	DEB,TT-Theory	F&S	III	
CO2,CO7	Outline the concept of Niyat and Aniyat Ayu. Ch Vi 3/28-35	CC	DK	KH	L&GD,PBL	DEB,TT-Theory,VV-Viva	F&S	III	
CO3,CO4,CO	Relate concept of daiva and purushakara with references Ca Sha	CC	MK	KH	DIS,F	CL-PR	F	III	

7	2/44. Ca Sh 6/27.				C				
CO2,CO4,CO7	Differentiate daiva and purushakara Ch Vi 3/29-30	CC	MK	K	L&GD,BS	CR-W,TT-Theory,VV-Viva	F&S	III	
CO4,CO5	Explain hetuviparit chikitsa in jwara Ch Vi 3/39-40	CC	MK	KH	L&GD,CBL	INT,TT-Theory,VV-Viva	F&S	III	
CO4,CO5	Explain apatarpana and its types. Ch Vi 42-44	CC	MK	KH	L&GD,CBL	TT-Theory,VV-Viva	F&S	III	
CO2,CO7	Explain concept of desha Ch Vi 3/47-48	CC	MK	K	L_VC,DIS,FV	PA,TT-Theory,VV-Viva	F&S	III	
CO2,CO4,CO7	Summarise the term karma with reference to different contexts	CC	MK	KH	DIS,FC	PRN	F	III	
CO1,CO2	Recite sutras Ch Vi 3/6,10	CK	MK	K	SDL,REC	P-REC,TT-Theory	F&S	III	
CO1,CO2	Summarize the chapter based on sutra Ch Vi 3/49-52	CK	NK	K	SDL	T-OBT,VV-Viva	F&S	III	
Topic 30 Cha.Vi.04-Trividha roga vishesha vijnyaneeya adhyaya (Lecture :2 hours, Non lecture: 3 hours)									
CO1,CO2	Justify the position of the chapter in the Samhita and its importance	CC	MK	KH	L&GD	INT,TT-Theory,VV-Viva	F&S	III	
CO2	Explain basic meaning and importance of key terms such as trividha roga visesha vijnana	CK	MK	K	L&GD	QZ ,COM,TT-Theory,VV-Viva	F&S	III	
CO2,CO6	Explain the application of aptopadesha, pratyaksha and anumana	CC	MK	KH	L,CB	P-PS,TT-Theo	F&S	III	H-RN

	in clinical examination. Ch Vi 4/3-8				L	ry,VV-Viva			
CO2	Recite sutra Ch Vi 4/4,12	CK	MK	K	SDL, REC	P-VIVA,P-REC	F&S	III	
CO1,CO2	Summarise the chapter as per sutra no. Ch Vi. 4/13-14	CK	NK	K	SDL	T-OBT,VV-Viva	F&S	III	
Topic 31 Cha.Vi. 05- Sroto vimana Adhyaya (Lecture :2 hours, Non lecture: 2 hours)									
CO1,CO2	Justify the position of the chapter in the Samhita and its importance	CC	MK	KH	L&GD	INT,TT-Theory,VV-Viva	F&S	III	
CO2	Explain basic meaning and importance of key terms such as srotas, srotodushti	CK	MK	K	L	TT-Theory,VV-Viva	F&S	III	
CO1,CO2	Explain importance of srotas Ch Vi 5/3-4	CK	MK	K	L&GD,BS	QZ ,COM,TT-Theory,VV-Viva	F&S	III	
CO2	Enlist the types of srotas Ch Vi 5/7	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	III	
CO2,CO3	Explain types and general causative factors of srotodushti Ch Vi 5/23,24	CK	MK	K	L&GD	T-OBT,TT-Theory,VV-Viva	F&S	III	H-RN
CO4,CO5	Explain hetu, lakshan and chikitsa of specific strotodushti Ch Vi 5/8, 10-22, 26-28	CK	MK	K	L&GD,CBL	TT-Theory,VV-Viva	F&S	III	H-RN
CO1,CO2	Recite sutras Ch Vi 5/3,4,7,9-27	CK	MK	K	SDL, REC	P-REC,TT-Theory	F&S	III	
CO1,CO2	Summarize the chapter based on Ch Vi5/28-30	CK	NK	K	SDL	T-OBT,VV-Viva	F&S	III	

Topic 32 Cha.Vi. 06-Roganika vimana adhyaya (Lecture :2 hours, Non lecture: 2 hours)									
CO1,CO2	Justify the position of the chapter in the Samhita and its importance	CC	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	III	
CO2	Explain basic meaning and importance of key terms such as roganeeka, anubandhya, anubandhy	CK	MK	K	L	TT-Theory,VV-Viva	F&S	III	
CO1,CO3	Enlist the types of diseases based on prabhav, bala, adhishtana, nimmitta, ashay. Ch Vi 6/3	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	III	H-RN
CO2	Explain the rationale behind classification of diseases. Ch Vi 6/4	CC	MK	KH	L&GD,BS	INT,TT-Theory,VV-Viva	F&S	III	
CO2,CO3	Enlist the diseases caused by shareera and manas doshas.Explain the relation between shareera and manasa doshas. Ch Vi 6/6-9	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	III	
CO2,CO3	Explain anubandhya and anubandha doshas Ch.Vi6/11	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	III	
CO2,CO3,CO7	Explain four types of agni. Ch Vi 6/12	CK	MK	K	L&GD,PL	TT-Theory,VV-Viva	F&S	III	
CO2,CO7	Enlist types of shareera prakruti Ch Vi 6/13	CK	MK	K	L&GD	P-ID,TT-Theory,VV-Viva	F&S	III	
CO2,CO7	Summarize the treatment principles of Prakrutika doshas (Vatala ,Pittal,Shlemal Prakrutis) Ch Vi 6/14-18	CC	MK	KH	L&GD	INT,TT-Theory,VV-Viva	F&S	III	
CO2	Enlist qualities of Rajavaidya Ch Vi 6/19	CK	MK	K	L,RP	P-RP,VV-Viva	F&S	III	
CO1	Summarize the chapter based on sutras Ch Vi 6/42-44	CK	NK	K	SDL	T-OBT,VV-Viva	F&S	III	
Topic 33 Cha.Vi. 07- Vyadhita rupeeya vimana Adhyaya (Lecture :2 hours, Non lecture: 2 hours)									

CO1,CO2	Justify the position of the chapter in the Samhita and its importance	CC	MK	KH	L&GD	INT,TT-Theory,VV-Viva	F&S	III	
CO2	Explain basic meaning and importance of key terms such as dvividah vyadhita prurusha	CK	MK	K	L	TT-Theory,VV-Viva	F&S	III	
CO2,CO3	Explain two types of vyadhit purusha (guru vyadhita and laghu vyadhita) Ch Vi 7/3,4	CC	MK	KH	L,RP	TT-Theory,VV-Viva	F&S	III	H-RN
CO2,CO8	Explain two types of vaidya (jnani and ajnani) Ch Vi 7/4	CC	MK	KH	L&GD	TT-Theory,VV-Viva	F&S	III	
CO2,CO3,CO4,CO5	Enlist the types of krimis (see activity list also) Ch Vi 7/9	CC	MK	KH	L&GD,FC,EDU	QZ ,PUZ,TT-Theory,VV-Viva	F&S	III	H-RN
CO4,CO5	Explain the trividha chikitsa Ch Vi 7/14	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	III	
CO2	Recite sutra Ch Vi 7/28	CK	MK	K	REC	VV-Viva	F&S	III	
CO1,CO2	Summarize the chapter with the help of Slokas 31 and 32	CK	NK	K	SDL	T-OBT,VV-Viva	F&S	III	
Topic 34 Cha.Vi. 08-Rogabhishagjiteeyam Adhyaayam. (Lecture :5 hours, Non lecture: 11 hours)									
CO1,CO2	Justify the position of the chapter in the Samhita and its importance	CC	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	III	
CO1,CO2,CO4	Explain the basic meaning and importance of sastrapareeksha, trividha upaya, tadvidyasambhasha, karya abhiivritti ghataka, dasavidha pareekshyabhava, dasavidha atura pareeksha	CC	MK	K	L	TT-Theory,VV-Viva	F&S	III	
CO1,CO2	Explain shashtrapareeksha. Ch Vi 8/3	CC	MK	K	L&GD,BL	DEB,TT-Theory,VV-Viva	F&S	III	

CO2	Enlist the three means of knowledge (trividha upaya). Ch Vi 8/6	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	III	
CO2	Explain the adhyayan and adhyapana vidhi. (also see activity list) Ch Vi 8/7,8	CK	MK	K	L,W	SA,VV-Viva	F&S	III	
CO1,CO2	Outline sambhashavidhi C Vi 8/16-18	CK	DK	KH	L&GD,EDU	DEB,TT-Theory,VV-Viva	F&S	III	
CO1	Describe three types of parishat Ch Vi 8/19,20	CK	DK	K	L,RP,SDL	P-RP,VV-Viva	F&S	III	
CO1,CO2	Enlist vadamarga padani Ch Vi 8/27	CK	DK	K	L,FC	TT-Theory,VV-Viva	F&S	III	
CO1,CO2	Explain dashavidha pareekshya bhavas. Ch Vi 8/68-77, 84	CK	MK	K	L&GD,BL	QZ ,TT-Theory,VV-Viva	F&S	III	
CO3,CO4,CO6,CO7	Explain dhatusamya pareeksha Ch Vi 8/89	CC	MK	KH	L,DIS	CHK,TT-Theory,VV-Viva	F&S	III	
CO1,CO2,CO6	Explain dashavidha aturapareeksha. Ch Vi 8/94 -123	CC	MK	KH	L&GD,CBL	PUZ,TT-Theory,VV-Viva	F&S	III	H-RN
CO1,CO2	Recite the sutras Ch Vi. 8/ 3,6 68-78.	CK	MK	K	SDL,REC	P-REC,TT-Theory	F&S	III	
CO1,CO2	Summarize the chapter with the help of shlokas 52-56	CC	NK	K	SDL	T-OBT,VV-Viva	F&S	III	
Topic 35 Cha.Sha.01-Katithapurusheeya Adhyaya (Lecture :2 hours, Non lecture: 3 hours)									
CO1,CO2	Describe the sthana adhikarana (objectives) of sharirasthana Cha.Sha 8/69	CC	MK	K	L&GD	TT-Theory,VV-Viva	F&S	II	

CO1,CO2	Justify the position of the chapter in the Samhita and its importance	CK	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	II	
CO2	Explain basic meaning and importance of key terms purusha, mana, atma, yoga and moksha	CK	MK	K	L&GD,BS	QZ ,COM,TT-Theory,VV-Viva	F&S	II	
CO2,CO4	Define ekadhatupurusha, shaddhatvatmak purush, chaturvimashataika purusha and rashi purusha, Ca Sh 1/16, 17, 35	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	II	
CO2,CO3,CO4	Explain lakshana, guna, vishaya and karma of manas and its role in jnanotpatti krama Ca Sha 1/ 18-24	CC	MK	K	L&GD,FC	TT-Theory,VV-Viva	F&S	II	
CO2,CO4	Enlist ashtaprakruti and shodasha vikara. Ca Sha 1/63-64	CC	MK	KH	L&GD	TT-Theory,VV-Viva	F&S	II	
CO2,CO4	Explain srusthiutpatti krama and pralaya Ca Sha 1/ 66-69	CC	MK	KH	L&GD	TT-Theory,VV-Viva	F&S	II	
CO2,CO4,CO7	Identify atmalinga as basic features of living organism Ca Sha 1/70-74	CC	MK	K	DIS,FC	TT-Theory,VV-Viva	F&S	II	
CO2,CO5	Explain naishtiki chikitsa Ca Sha 1/86-94	CC	MK	KH	L&GD	TT-Theory,VV-Viva	F&S	II	
CO2,CO7	Explain dukhahetavah (causes of misery) Ca Sha 1/98	CC	MK	KH	L&GD	TT-Theory,VV-Viva	F&S	II	
CO2,CO3,CO4,CO7	Outline asatmyendriyartha samyoga as a cause of diseases Ca Sha 1/118-128.	CC	MK	KH	L&GD,FC	DEB,TT-Theory,VV-Viva	F&S	II	
CO2,CO4,CO	Define and explain prajnaaparadha, with terms dhivibhramsha,	CC	MK	KH	L&G	TT-Theory,V	F&S	II	

7	dhruti vibhramsha, smriti vibhramsha.Ca Sha 1/99-102.				D	V-Viva			
CO2,CO4,CO7	Describe vedana, vedana adhishtana and vedana nivrutti Ca Sha 1/134-137.	CC	MK	KH	L&GD	TT-Theory,VV-Viva	F&S	II	
CO2,CO4,CO7	Define state of Yoga Ca Sha 1/138-141	CK	MK	KH	L&GD	TT-Theory,VV-Viva	F&S	II	
CO2,CO4,CO7	Outline mokshaprapti upaya. Ca Sha 1/142-146	CC	DK	KH	L&GD,BS	P-VIVA,TT-Theory	F&S	II	
CO1,CO4,CO7	Explain lakshana of Prashaanta Bhutaatma. Ca Sha 1/155-156	CK	DK	K	L&GD	VV-Viva	F&S	II	
CO2,CO3,CO4,CO7	Enlist and explain smriti hetu Ch Sha 1/148-149	CC	MK	KH	L&PPT	TT-Theory,VV-Viva	F&S	II	
CO3,CO7	Relate smritihetus with process of learning	CAP	NK	KH	L_VC,BS	VV-Viva	F	II	
CO3,CO8	Illustrate smritihetus through game (activity no.11)	PSY-SET	DK	SH	EDU,SDL,PSM,GBL	O-GAME	F	II	
CO1,CO2	Recite sutras Cha.Sha.16 -23, 28-30,36, 63, 64,70-74, 98,102,109,137-139, 148,149	CK	MK	K	SDL,REC	P-REC,TT-Theory	F&S	II	
CO2	Summarize the chapter based on sutra Ca. Sha 1/ 156	CK	NK	K	SDL	T-OBT,VV-Viva	F&S	II	
Topic 36 Cha.Sha.02-Atulyagothreeyam Adhyaaya (Lecture :1 hours, Non lecture: 0 hours)									
CO1,CO2	Justify the position of the chapter in the Shareerasthana and its importance	CC	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	II	

CO2	Explain basic meaning and importance of key terms in the chapter atulya-gotra, beeja, dwireta, kliba, prajnaparadha, pratikarma, daiva	CK	DK	K	L&GD,BS	QZ ,COM,TT-Theory,VV-Viva	F&S	II	
CO3,CO7	Enlist prerequisites for conception Ch Sha 2/4	CK	MK	K	L&GD	QZ ,TT-Theory,VV-Viva	F&S	II	
CO3,CO7	Summarize the factors affecting conception, foetus Cha Sha 2/6-12	CK	DK	K	L&GD	QZ ,TT-Theory,VV-Viva	F&S	II	
CO2,CO7	Enlist shodasa dhatu (16 factors) in the formation of fetus Ch Sha 2/32,33	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	II	
CO3,CO7	Outline features of multiple pregnancies, dwireta (hermaphroditism) and other types of sexual abnormalities Ca sh 2/12-14, 18-21	CK	DK	K	L&GD	TT-Theory,VV-Viva	F&S	II	
CO3,CO7	Explain lakshanas of sadyogruhit garbhini lakshana. Ca Sha 2/23-27	CK	DK	K	L&GD	TT-Theory,VV-Viva	F&S	II	
CO3,CO7	Explain ativahika purusha (factors carrying from previous birth to next birth). Ca Sha 2/31-32	CK	MK	K	L&GD,IBL	CR-W,TT-Theory,VV-Viva	F&S	II	
CO3,CO7	Differentiate daivakara and purushaakara Ca Sha 2/44.	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	II	
CO3,CO7,CO8	Explain niroga lakshana. Ca sha 1/46-47	CK	DK	K	L&GD,CBL	CHK,TT-Theory,VV-Viva	F	II	
CO1,CO2	Recite sutras Cha.Sha.2/26, 27, 35,44,45-47	CK	MK	K	SDL, REC	P-REC,TT-Theory	F&S	II	
CO1,CO2	Summarize thechapter based on Ca Sha 2/48	CK	NK	K	SDL	T-OBT,VV-Viva	F&S	II	

Topic 37 Cha.Sha.03-Khuddika garbhavakranti Adhyaya (Lecture :1 hours, Non lecture: 0 hours)									
CO1,CO2	Justify the position of the chapter in the Shareerasthana and its importance	CK	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	II	
CO2	Explain basic meaning and importance of key terms such as matrija, pitrija, sattvaja, satmyaja, rasaja, atmaja bhavas, beeja and beejabhaga	CK	MK	K	L&GD,BS	QZ ,COM,TT-Theory,VV-Viva	F&S	II	
CO3,CO7	Enlist factors responsible for the formation, growth of the embryo Cha Sha 3/3	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	II	
CO1,CO3,CO7	Outline the sambhasha parishat on garbha utpatti (formation of embryo) and factors contributed from different agents like satva, satmya etc. Ch Sha 3/4	CK	DK	K	L&GD	PRN,DEB	F&S	II	
CO3,CO7	Explain matruja, pitruja, atmaja, satmyaja, rasaja, satvaja bhavas of garbha Ch Sha 3/6-14	CK	DK	KH	L&GD	TT-Theory,VV-Viva	F&S	II	
CO2,CO3,CO7	Explain role of beeja-beejabhaga dushti in congenital abnormalities Ch Sha 3/17	CAP	MK	KH	L&GD	TT-Theory,VV-Viva	F&S	II	
CO2	Recite sutras no Ch Sha 3/17	CK	MK	K	SDL,REC	P-REC,TT-Theory	F&S	II	
CO1	Summarize the chapter based on sutra Ch Sha 3/26-27.	CK	NK	K	SDL	T-OBT,VV-Viva	F&S	II	
Topic 38 Cha.Sha.04-Mahatee garbhavakranti Adhyaya (Lecture :1 hours, Non lecture: 2 hours)									
CO1,CO2	Justify the position of the chapter in the Shareerasthana and its importance	CC	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	II	
CO2	Explain basic meaning and importance of key terms such as garbhopaghatakar bhava, manas prakriti.	CK	MK	K	L&GD,BS	QZ ,COM,TT-Theory,VV-Viva	F&S	II	

CO3,CO7	Define garbha Ch. Sha 4/5	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	II	
CO3,CO7	Enlist components of shad dhatvaatmak purush Ca Sh 4/6	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	II	
CO3,CO7	Explain functions of atma in the formation of garbha. Ch sha 4/8	CK	MK	KH	L&GD	TT-Theory,VV-Viva	F&S	II	
CO3,CO7	Outline maasanumasik garbha poshana Ch Sha 4/9-11,20-24	CK	DK	K	L&GD	TT-Theory,VV-Viva	F&S	II	
CO3,CO7	Explain garbhopaghatakara bhavas. Ch Sh 4/18	CC	MK	KH	L&GD	TT-Theory,VV-Viva	F&S	II	
CO3,CO7	Summarize the causes of congenital abnormalities Ch Sha 4/30-32	CK	MK	K	L&GD	P-POS,TT-Theory	F&S	II	
CO3,CO7	Explain qualities of satva-raja-tama. Cha Sh 4/36	CK	MK	KH	L&GD	QZ ,TT-Theory,VV-Viva	F&S	II	
CO3,CO7	Outline features of shodash manasa prakritis (sixteen types of mental constitution). Ch Sha 4/36-40	CK	DK	KH	L&GD,L_VC,CBL	PM,TT-Theory,VV-Viva	F&S	II	
CO3,CO6	Identify some important features of manasaprakriti in individuals (also see activity list)	PSY-SET	NK	SH	CBL,RP,D	P-RP,VV-Viva	F	II	
CO1,CO2	Recite sutras Ch Sha 4/6,36	CK	MK	K	SDL,REC	P-REC,TT-Theory	F&S	II	
CO1,CO2	Summarize the chapter as per sutras given at the end of the chapter Ca Sha 4/42-45.	CK	NK	K	SDL	T-OBT,VV-Viva	F&S	II	

Topic 39 Cha.Sha.05-Purushavichaya Shareera Adhyaya (Lecture :1 hours, Non lecture: 4 hours)									
CO1,CO2	Justify the position of the chapter in the Samhita	CC	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	II	
CO2	Explain the basic meaning and importance of key terms in the chapter such as lokapurushasamyata, hetwadi panchaka and satya buddhi	CK	MK	K	L&GD,BS	QZ ,COM,TT-Theory,VV-Viva	F&S	II	
CO2,CO4,CO7	Define loka purusha samya siddhanta Ch Sh. 4/13; 5/3	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	II	
CO2,CO4	Illustrate loka -purusha samya siddhanta with examples Ch Sha 5/5	CAP	DK	KH	DIS,BS,PER	TT-Theory,VV-Viva	F&S	II	
CO2,CO7	Define and describe satyabuddhi Ch Sh.5/7,16-19	CC	MK	K	L&GD	TT-Theory,VV-Viva	F&S	II	
CO2,CO4	Enlist and describe hetvadi panchaka Ch Sh.5/8	CK	DK	K	L&GD	TT-Theory,VV-Viva	F&S	II	
CO4,CO7	Illsutrate pravritti-nivritti upaya (see activity list)	CAP	DK	KH	D	P-PS,TT-Theory,VV-Viva	F	II	
CO1,CO2	Recite sutras Ch Sha 5/ 3, 5, 8,16	CK	MK	K	SDL,REC	P-REC,TT-Theory	F&S	II	
CO1,CO2	Summarize thechapter as per sutra Ch Sh 5/25,26	CK	NK	K	SDL	T-OBT,VV-Viva	F&S	II	
Topic 40 Cha.Sha.06-Sareeravichaya adhyaya (Lecture :1 hours, Non lecture: 2 hours)									
CO1,CO2	Justify the position of the chapter in the Samhita and its importance	CC	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	II	
CO2	Explain the basic meaning and importance of key terms in the	CK	MK	K	L&G	QZ ,COM,TT-	F&S	II	

	chapter such as vriddhikara bhava, kala kaala mrityu and param ayu				D,BS	Theory,VV-Viva			
CO2	Define shareera Ch. Sh.6/4	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	II	
CO2,CO4	Apply samanya visesha siddhanta in shareera Ch.Sh.6/11	CAP	MK	KH	L&GD	TT-Theory,VV-Viva	F&S	II	
CO2	Describe shareera vruddhikara bhava Ch.Sh.6/12	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	II	
CO2	Describe bala vruddhikara bhava Ch.Sh.6/13	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	II	
CO2	Explain ahara parinamakara bhava Ch.Sh.6/14,15	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	II	
CO2,CO7	Classify shareera-gunas into malarupa and prasadarupa Ch.Sh..6/16,17	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	II	
CO2	Explain the concept of kala and Akala Mrithyu Ch.Sh 6/28	CK	DK	K	L&GD	TT-Theory,VV-Viva	F&S	II	
CO2,CO7	Define parama ayu karanam Ch.Sh 6/30	CK	DK	K	L&GD	TT-Theory,VV-Viva	F&S	II	
CO7	Analyse data related to akala-mrityu (see activity list)	CAP	DK	KH	DIS,IBL,EDU	M-CHT	F	II	
CO1,CO2	Recite the sutra Ch Sha 6/4, 5-11, 12,13, 17, 28, 30	CK	MK	K	SDL,REC	P-REC,TT-Theory	F&S	II	
CO1,CO2	Summarize the chapter as per sutra Ch Sh 6/31-34	CK	NK	K	SDL	T-OBT,VV-Viva	F&S	II	

Topic 41 Cha.Sha.07- Sareerasankhya sareera Adhyaya (Lecture :1 hours, Non lecture: 2 hours)									
CO1,CO2	Justify the position of the chapter in the Samhita and its importance	CC	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	II	
CO2	Explain the basic meaning and importance of key terms in the chapter such as chetanaadishtana, pranayathana, koshtanga, pratyanga, anjali pramana etc.	CK	MK	K	L&GD,BS	QZ ,COM,TT-Theory,VV-Viva	F&S	II	
CO2,CO3,CO7	Explain paramanu bheda shariram Ch Sha 7/17	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	II	
CO1,CO2	Recite sutra Ch Sha 7/17	CK	MK	K	SDL,REC	P-REC,TT-Theory	F&S	II	
CO1,CO2	Summarize the chapter as per sutra Ch Sha 7/19, 20	CK	NK	K	SDL	T-OBT	F&S	II	
Topic 42 Cha.Sha.08-Jathisutreeya Adhyaya (Lecture :1 hours, Non lecture: 12 hours)									
CO1,CO2	Justify the position of the chapter in the Samhita and its importance	CC	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	II	
CO2	Explain basic meaning and importance of key terms in the chapter such as jathi, pumsavana, sutikagara etc	CK	MK	K	L&GD,BS	QZ ,COM,TT-Theory,VV-Viva	F&S	II	
CO2	Enlist garbha upaghatakara bhava Ch.Su 8/21	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	II	
CO2	Describe the infrastructure of a sutikagaram Ch. Su 8/33	CK	NK	K	PrBL,SDL	M-MOD,TT-Theory	F&S	II	V-BL
CO3,CO8	Demonstrate garbhopghatakarabhava through skit (see activity list)	PSY-SET	DK	KH	ML,RP	QZ ,CHK,VV-Viva	F	II	
CO1,CO2	Summarize the chapter as per the sutra Ch Sha 8/68,69	CK	NK	K	SDL	T-OBT,VV-	F&S	II	

						Viva			
Topic 43 Cha.In.1-Varnasvariyam Indriya Adhyaya (Lecture :1 hours, Non lecture: 1 hours)									
CO1,CO2	Describe sthana adhikarana (objectives) of Indriyasthana	CK	MK	KH	L&GD	INT,TT-Theory,VV-Viva	F&S	III	
CO1,CO2	Justify the position of the chapter in the Samhita and its importance	CC	MK	KH	L&GD	INT,TT-Theory,VV-Viva	F&S	III	
CO2	Explain basic meaning and importance of key terms such as arishta, vikritibheda, varna, swara etc. related to rishta	CK	MK	K	L&GD,BS	QZ ,COM,TT-Theory,VV-Viva	F&S	III	
CO2,CO6	Enlist factors for assessing rishta Ref: Ch. In 1/3	CK	MK	K	L&GD,BL	TT-Theory,VV-Viva	F&S	III	
CO2,CO6	Enlist six types of prakruti bheda. Ch In 1/5	CK	MK	K	L&GD,EDU	TT-Theory,VV-Viva	F&S	III	
CO2,CO6	Enist vikritibheda (types of vikriti) in the context of rishta Ch In 1/6,7, 17-23	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	III	
CO2,CO6	Explain prakruta and vaikarika varna Ch In 1/8,9	CK	MK	K	L&GD,ML	TT-Theory,VV-Viva	F&S	III	
CO2,CO6	Summarize varnavishayak arishta (rishta related to varna) Ch In 1/9-13	CC	MK	KH	L&GD	TT-Theory,VV-Viva	F&S	III	
CO2,CO6	Explain prakruta and vaikarika swara (normal and abnormal voices) Ch In 1/14	CK	MK	K	L&GD,EDU	QZ ,TT-Theory,VV-Viva	F&S	III	
CO2,CO6	Summarize swara vishayak arishta (arishta related to voice) Ch In 1/15,24,25	CC	DK	KH	L&GD	TT-Theory,VV-Viva	F&S	III	

CO1,CO2	Summarize the chapter Ch In 1/26	CC	NK	KH	SDL	T-OBT,VV-Viva	F&S	III	
Topic 44 Cha.In.2-Pushpitakam Indriya Adhyaya (Lecture :1 hours, Non lecture: 0 hours)									
CO1,CO2	Justify the position of the chapter in the sequence	CK	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	III	
CO2	Explain basic meaning and importance of key terms such as niyatarishta, aniyatarishta	CK	MK	K	L&GD,BS	QZ ,COM,TT-Theory,VV-Viva	F&S	III	
CO6	Outline gandhavishayak arishta (prognistic signs identified through smell) Ch In 2/7-16	CK	DK	K	L&GD	TT-Theory,VV-Viva	F&S	III	
CO2,CO3,CO6	Summarize rasavishayak arishta (progostic signs related to taste) Ch In 2/17-22	CK	DK	K	L&GD	TT-Theory,VV-Viva	F&S	III	
CO1,CO2	Summarise the chapter Ch In 3/23	CK	NK	K	SDL	T-OBT,VV-Viva	F&S	III	
Topic 45 Cha.In.3-Parimarshaneeyam Indriyam Adhyaya (Lecture :1 hours, Non lecture: 0 hours)									
CO1,CO2	Justify the position of the chapter in the Samhita and its importance	CC	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	III	
CO2,CO6	Enlist Sparshagamya bhava (palpable signs) in arishta Ch In 3/4	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	III	
CO2,CO6	Explain Sparshavishayak Arishta lakshna (based\on palpation)) Ch In 3/5,6	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	III	
CO1,CO2	Summarise the chapter as per the sutras given at the end of the chapter Ch In 3/7	CK	NK	K	SDL	T-OBT,VV-Viva	F&S	III	
Topic 46 Cha.In.4-Indriyaneekam Indriya adhyaya (Lecture :1 hours, Non lecture: 0 hours)									

CO1,CO2	Justify the position of the chapter in the Samhita and its importance	CK	MK	K	L&GD	INT,TT-Theory,VV-Viva	F	III	
CO2,CO6	Explain indriya vishayaka arishta samanya niyama (general rule regarding involvement of indriya) Ch In 4/3-6	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	III	
CO1,CO2	Summarise the chapter as per the sutras given at the end of the chapter Ch In 4/27	CK	NK	K	SDL	T-OBT,VV-Viva	F&S	III	
Topic 47 Cha.In.5-Purvarupeeyam Indriyam Adhyaya (Lecture :1 hours, Non lecture: 2 hours)									
CO1,CO2	Justify the position of the chapter in the Samhita and its importance	CC	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	III	
CO2,CO6	Enlist jvara rupa vishayaka poorvaroopiya rishta (rishta based on purvarupa of jvara) Ch In 5/3-5	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	III	
CO2,CO3,CO4	Define swapna Ch In 5/41-42	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	III	
CO2,CO6	Enlist and explain swapna bheda (types of swapna) Ch In 5/43	CC	MK	KH	L&GD	TT-Theory,VV-Viva	F&S	III	
CO1,CO2	Recite sutra Ch In 5/41-43	CK	MK	K	SDL,REC	P-REC,TT-Theory	F&S	III	
CO1,CO2	Summarise the chapter as per sutra Ch In 5/47	CK	NK	K	SDL	T-OBT,VV-Viva	F&S	III	
Topic 48 Cha.In.6-Katamanisharireeyam Indriyam Adhyaya (Lecture :1 hours, Non lecture: 0 hours)									
CO1,CO2	Justify the position of the chapter in the Samhita and explain basic meaning and importance of key terms in the chapter	CK	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	III	
CO2,CO3,CO6	Outline arishta related to pureesha, mutra and swayathu Ch In 6/11-19	CC	DK	K	L&GD	TT-Theory,VV-Viva	F&S	III	

CO1,CO2	Summarise the chapter as per sutras given at the end of the chapter Ch In 6/25	CK	NK	K	SDL	T-OBT,VV-Viva	F&S	III	
Topic 49 Cha.In.7-Pannarupiyam Indriyam Adhyaya (Lecture :1 hours, Non lecture: 0 hours)									
CO1,CO2	Justify the position of the chapter in the Samhita	CK	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	III	
CO2,CO3,CO6	Explain basic meaning and importance of chaya, pratichaya and prabha	CC	MK	K	L&GD	TT-Theory,VV-Viva	F&S	III	
CO2,CO6	Explain pratichaya vishayaka arishta. Ch In 7/4-6	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	III	
CO2,CO6	Explain chaya vikruti arishtas. Ch In 7/4-6	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	III	
CO2,CO6	Enlist five types chaya Ch In 7/10-13	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	III	
CO2,CO6	Enlist seven types of prabha Ch In 7/14-15	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	III	
CO2,CO3,CO6	Differentiate chaya and prabha Ch In 7/16-17	CC	MK	K	L_VC	TT-Theory,VV-Viva	F&S	III	
CO1,CO2	Summarise the chapter Ch In 7/32	CK	NK	K	SDL	T-OBT,VV-Viva	F&S	III	
Topic 50 Cha.In.8-Avakshiraseeyam Indriyam Adhyaya (Lecture :1 hours, Non lecture: 0 hours)									
CO1,CO2	Justify position of the chapter in Samhita	CC	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	III	
CO1,CO2	Summarise the chapter as per sutra given at the end of the chapter	CK	NK	K	SDL	T-OBT,VV-Viva	F&S	III	

Topic 51 Cha.In.9-Yasya shyavanimittiya Indriya Adhyaya (Lecture :1 hours, Non lecture: 0 hours)									
CO1	Justify position of the chapter in Samhita	CK	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	III	
CO2	Explain basic meaning and importance of key terms such as ashtamaharoga	CC	MK	K	L	TT-Theory,VV-Viva	F&S	III	
CO2,CO4,CO6	Enlist ashtamaharogas Ch In 9/8-9	CC	MK	K	L&GD	TT-Theory,VV-Viva	F&S	III	
CO1,CO2	Summarise the chapter as per the sutra given at the end of the chapter Ch In 9/23,24	CK	NK	K	SDL	T-OBT,VV-Viva	F&S	III	
Topic 52 Cha.In.10-Sadyomaraneeyam Indriya Adhyaya (Lecture :1 hours, Non lecture: 0 hours)									
CO1,CO2	Justify poisition of the chapter and key terms in the chapter	CC	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	III	
CO2,CO6	Explain sadyomaraneeya arishtas Ch In 10/3-20	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	III	
CO1,CO2	Summarise the chapter as per the sutras given at the end of the chapter Ch In 10/21	CK	NK	K	SDL	T-OBT,VV-Viva	F&S	III	
Topic 53 Cha.In.11-Anujyotiyam Indriya Adhyaya (Lecture :1 hours, Non lecture: 0 hours)									
CO1,CO2	Justify the position of the chpater and explain key terms such as arishta Ch In 11/29	CC	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	III	
CO2,CO6	Define arishta Ch In 11/29	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	III	
CO1,CO2	Recite sutra Ch In 11/29	CK	MK	K	SDL	P-VIVA,TT-Theory	F&S	III	

Topic 54 Cha.In.12-Gomayachurniyam Indriya Adhyaya (Lecture :1 hours, Non lecture: 17 hours)									
CO1,CO2	Justify the posttion of the chapter and explain key terms such as mumurshu, prasasta duta and mangalika dravya	CC	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	III	
CO2,CO6	Summarize mumurshu lakshana Ch In 12/9-25	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	III	
CO2,CO6	Outline prashasta doota lakshana and mangalika dravya Ch In 12/71-80	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	III	
CO2,CO4	Define arogya in the context of arishta Ch In 12/87	CC	MK	K	L&GD	TT-Theory,VV-Viva	F&S	III	
CO1,CO2	Summarise the chapter as per sutra given at the end of the chapter Ch In 12/89	CK	NK	K	SDL	T-OBT,VV-Viva	F&S	III	

List of Practicals (Term and Hours)

PRACTICALS (As a part of NLH)			
S.No	**List of Topics**	**Term**	**Hours**
1	SHLOKA PATHANA- 1	1	10
2	LEARNING THROUGH VYAKHYANA-1	1	3
3	OBSERVING THE PRACTICAL UTILITY OF SNEHANA AND SWEDANA	1	2
4	IDENTIFICATION OF BAHUDOSHA LAKSHANA IN PATIENTS	1	2
5	ASSESSMENT OF DISEASES BASED ON TRIVIDHA BODHYA SANGRAHA	1	2
6	IDENTIFICTION OF ASHTA DOSHA IN STHOULYA	1	2
7	CLINICAL OBSERVATIONS ON NIJA AGANTUJA RELATIONSHIP	1	2
8	CLINICAL OBSERVATION ON SHADUPAKRAMA	1	2
9	ASSESSMENT OF RAKTA DUSHTI KARANA IN SPECIFIC CLINICAL CONDITIONS	1	2
10	OBSERVATIONS ON USE OF AGRYA AUSHADHA IN CLINICAL PRACTICE	1	2
11	ASSESSMENT OF DHATU-UPADHATU-MALA PRADOSHAJA VIKARAS IN PATIENTS	1	3
12	SHLOKA PATHANA- 2	2	10
13	LEARNING THROUGH VYAKHYANA-2	2	3
14	CASE TAKING IN RELATION TO NIDANA PANCHAKA	2	12
15	DIFFERENTIAL DIAGNOSIS OF SKIN DISEASES BASED ON GUIDELINES ON KUSHTA	2	2
16	PRAMANA PARIKSHA	2	2
17	IDENTIFICATION OF VIKARAVIGHATA BHAVA ABHAVA IN PATIENTS	2	2
18	EXPLORATION OF LOKA PURUSHA SAMYA VADA IN THE BACK GROUND OF ONE HEALTH	2	2
19	SHLOKA PATHANA-3	3	10
20	LEARNING THROUGH VYAKHYANA-3	3	3
21	LEARNING THROUGH SAMBHASHA PARISHAD	3	6
22	SROTAS PROFORMA	3	2

23	LEARNING THROUGH TANTRA YUKTI	3	5
24	ASSESSMENT OF HEALTH THROUGH DHATU SAMYA PAREEKSHA	3	2
25	AGNI ASSESSMENT BASED ON APACHARA	3	2
26	TRIVIDHA ROGA VISHESHAVIJNANA IN DIAGNOSIS	3	3
27	ASSESSMENT OF UPASAYA AND ANUPASAYA IN PATIENTS	3	2

Table 4: Learning objectives (Practical)

A4 Course outcome	B4 Learning Objective (At the end of the session, the students should be able to)	C4 Domain/sub	D4 Must to know / desirable to know / Nice to know	E4 Level Does/ Shows how/ Knows how/ Know	F4 T-L method	G4 Assessment (Refer abbreviations)	H4 Formative/ summative	I4 Term	K4 Integration
Topic 1 SHLOKA PATHANA- 1									
CO1,CO2	Recite the selected slokas in each chapter	CK	MK	K	REC	PP-Practical,VV-Viva	F&S	I	
CO1,CO2	Compile slokas selected for recitation	CK	MK	K	SDL	PP-Practical,VV-Viva	F&S	I	
Topic 2 LEARNING THROUGH VYAKHYANA-1									
CO1,CO2	Interpret selected sutras with the help of Ayurveda Deepika Vyakhyana of Carakasamhita	CC	MK	KH	L&GD,DIS,TBL	PP-Practical,VV-Viva	F&S	I	
CO1,CO2	Prepare narrative summary of vyakhyana for the specified sutras	CAP	MK	KH	SDL	PP-Practical,VV-Viva	F&S	I	
CO1,CO2	Appreciate importance of Vyakhyana in learning Samhita	AFT-REC	MK	KH	D	P-VIVA	F&S	I	
Topic 3 OBSERVING THE PRACTICAL UTILITY OF SNEHANA AND SWEDANA									
CO4,CO5	Identify and compile experiences of people undergoing sneha-	CAP	MK	KH	SDL,	PP-Practical	F&S	I	V-PC

	sweda				RLE				
Topic 4 IDENTIFICATION OF BAHUDOSHA LAKSHANA IN PATIENTS									
CO3,CO4,CO6,CO7	Assess Bahudoshalakshana in patients	PSY-SET	MK	SH	CBL, PT	PP-Practical,VV-Viva	F&S	I	
CO3,CO4,CO6,CO7	Appreciate the role and importance of assessing bahudosha lakshana in clinical practice	AFT-REC	MK	SH	CBL, PRA	PP-Practical,VV-Viva	F&S	I	
Topic 5 ASSESSMENT OF DISEASES BASED ON TRIVIDHA BODHYA SANGRAHA									
CO3,CO4,CO6,CO7	Assess diseases based on trividha-bodhya-sangraha ie. vikaraprakriti(nature of disease), samuthana (causative factors) and adhishthana (site of disease)	PSY-SET	MK	SH	CBL, PRA	PP-Practical,VV-Viva	F&S	I	
CO3,CO4,CO6,CO7	Appreciate role and importance of trividhabodhyasangraha in clinical practice	AFT-REC	MK	SH	CBL, PRA	PP-Practical,VV-Viva	F&S	I	
Topic 6 IDENTIFICTION OF ASHTA DOSHA IN STHOULYA									
CO3,CO4,CO6,CO7	Assess ashtadosha of atisthoulya in subjects	PSY-SET	MK	SH	CBL, D	TT-Theory,VV-Viva	F&S	I	
CO3,CO4,CO6,CO7	Maintain good communication skills with patients	AFT-RES	MK	SH	CBL, D,PRA	TT-Theory,VV-Viva	F&S	I	
Topic 7 CLINICAL OBSERVATIONS ON NIJA AGANTUJA RELATIONSHIP									
CO3,CO4,CO6,CO8	Identify realtionship bewteen nija and agantu in clinical conditions	PSY-SET	MK	SH	CBL, PT,D	PP-Practical,VV-Viva	F&S	I	
CO4,CO8	Develop good rapport with patients	AFT-VAL	MK	SH	CBL, PT,D	P-VIVA,VV-Viva	F&S	I	

Topic 8 CLINICAL OBSERVATION ON SHADUPAKRAMA									
CO3,CO4,CO5,CO8	Identify shadupakrama in treatment plans of different diseases	PSY-SET	MK	SH	CBL,PT,D	PP-Practical,VV-Viva	F&S	I	
CO5,CO8	Develop good communications skills in clinics	AFT-REC	MK	SH	CBL,PT,D	PP-Practical,VV-Viva	F&S	I	
Topic 9 ASSESSMENT OF RAKTA DUSHTI KARANA IN SPECIFIC CLINICAL CONDITIONS									
CO3,CO4,CO6,CO7	Identify raktadushti karanas in patients affected by raktadushti, especially, skin diseases	PSY-SET	MK	SH	CBL,D,PRA	PP-Practical,VV-Viva	F&S	I	
CO3,CO4,CO6,CO7	Develop good communication skills with patients	AFT-REC	MK	SH	CBL,D,PRA	PP-Practical,VV-Viva	F&S	I	
Topic 10 OBSERVATIONS ON USE OF AGRYA AUSHADHA IN CLINICAL PRACTICE									
CO1,CO4,CO5	Justify use of agraushadhas in common clinical conditions	PSY-MEC	MK	SH	PER	P-VIVA	F&S	I	
CO8	Develop good comunication skills	AFT-REC	MK	SH	DIS,PER	P-VIVA	F&S	I	
Topic 11 ASSESSMENT OF DHATU-UPADHATU-MALA PRADOSHAJA VIKARAS IN PATIENTS									
CO3,CO4,CO6,CO7	Identify dhatu-mala-upadahtu pradoshaja vikaras in patients	PSY-SET	MK	SH	CBL,PT,D_BED	P-EXAM,VV-Viva	F&S	I	
CO3,CO4,CO8	Develop rapport with patients	AFT-REC	MK	SH	CBL,D_BED	P-VIVA,VV-Viva	F&S	I	

Topic 12 SHLOKA PATHANA- 2									
CO2	Recite the selected slokas in each chapter	CK	MK	K	REC	P-VIVA	F&S	II	
CO2	Compile slokas selected for recitation	CK	MK	K	TBL, SDL	P-VIVA	F&S	II	
Topic 13 LEARNING THROUGH VYAKHYANA-2									
CO2	Interpret selected sutras with the help of Ayurveda Deepika Vyakhyana of Carakasamhita	CAP	MK	KH	L&G D,DIS ,TBL	P-VIVA	F&S	II	
CO2	Prepare narrative summary of vyakhyana for the specified sutras	CAP	MK	KH	DIS,S DL	P-VIVA	F&S	II	
CO1,CO2	Appreciate importance of Vyakhyana in learning Samhita	AFT-REC	MK	KH	D	P-VIVA	F&S	II	
Topic 14 CASE TAKING IN RELATION TO NIDANA PANCHAKA									
CO3,CO4,CO 6,CO7	Perform case taking based on nidana-panchaka	PSY-SET	MK	SH	CBL, D_BE D	P-VIVA	F&S	II	
CO8	Develop rapport with patients	AFT-REC	MK	SH	CBL, D_BE D	T-EMI,P-VIVA	F&S	II	
CO6,CO8	Develop clinical skills based on Ayurvedic clinical methods	PSY-SET	MK	SH	CBL, D_BE	PP-Practical	F&S	III	

					D				
Topic 15 DIFFERENTIAL DIAGNOSIS OF SKIN DISEASES BASED ON GUIDELINES ON KUSHTA									
CO4,CO6,CO8	Assess skin diseases based on Ayurvedic parameters	PSY-SET	MK	SH	CBL, D_BED	PP-Practical	F&S	II	
CO6,CO8	Develop skills based on Ayurvedic clinical methods	AFT-REC	MK	SH	D_BED	PP-Practical	F&S	II	
Topic 16 PRAMANA PARIKSHA									
CO3,CO4,CO6,CO7	Assess physiometry based on pramana-pareeksha mentioned in Ayurveda	PSY-SET	MK	SH	D	VV-Viva	F&S	II	
CO8	Appreciate importance of Ayurvedic methods of measurements	AFT-REC	MK	SH	D	VV-Viva	F&S	II	
Topic 17 IDENTIFICATION OF VIKARAVIGHATA BHAVA ABHAVA IN PATIENTS									
CO2,CO3,CO4,CO6,CO7	Apply the conccept of "vikaravisatabhavabhavapractivisesha" in understanding diseases	CAP	MK	KH	CBL, CD	P-VIVA	F&S	II	
CO6	Perform case taking based on the concept of vikaravighata bhava abhava	PSY-SET	MK	SH	CD,D	P-VIVA	F&S	II	
Topic 18 EXPLORATION OF LOKA PURUSHA SAMYA VADA IN THE BACK GROUND OF ONE HEALTH									
CO4,CO7,CO8	Apply lokapurusha-samya-sidhanta in contemporary life	CAP	MK	KH	DIS,BS,PrBL	VV-Viva	F&S	II	
Topic 19 SHLOKA PATHANA-3									
CO1,CO2	Recite the selected slokas in each chapter	CK	MK	K	REC	VV-Viva	F&S	III	

CO1,CO2	Compile slokas selected for recitation	CK	MK	K	SDL	VV-Viva	F&S	III	
Topic 20 LEARNING THROUGH VYAKHYANA-3									
CO1,CO2	Interpret selected sutras with the help of Ayurveda Deepika Vyakhyana of Carakasamhita	CAP	MK	KH	L,LS	VV-Viva	F&S	III	
CO1,CO2	Prepare narrative summary of vyakhyana for the specified sutras	CC	MK	KH	SDL	VV-Viva	F&S	III	
CO1,CO2	Appreciate importance of Vyakhyana in learning Samhita	AFT-REC	MK	KH	D	P-VIVA	F&S	III	
Topic 21 LEARNING THROUGH SAMBHASHA PARISHAD									
CO1,CO2	Demonstrate Sambhasha parishat to discuss different topics	PSY-ADT	MK	SH	D	P-VIVA	F&S	III	
CO8	Appreciate the importance of collective thinking in learning Ayurveda	AFT-VAL	MK	SH	DIS,D	P-VIVA	F&S	III	
Topic 22 SROTAS PROFORMA									
CO4,CO6,CO8	Assess involvement of srotas in clinical conditions	PSY-SET	MK	SH	D_BED	VV-Viva	F&S	III	
CO8	Develop clinical skills based on Ayurvedic clinical methods	AFT-REC	MK	SH	D_BED	VV-Viva	F&S	III	
Topic 23 LEARNING THROUGH TANTRA YUKTI									
CO1,CO2,CO4	Apply tantrayukti and interpret the sutras	CAP	MK	KH	TBL,D	P-VIVA	F&S	III	
CO1	Appreciate the importance of Tantrayukti in interpreting Samhita	CAP	MK	KH	DIS,TBL	P-VIVA,VV-Viva	F&S	III	

Topic 24 ASSESSMENT OF HEALTH THROUGH DHATU SAMYA PAREEKSHA									
CO3,CO4,CO6	Assess health of a person based through dhatu-samya-pareeksha	PSY-SET	MK	SH	CBL,D_BED	P-VIVA	F&S	III	
CO8	Appreciate health of a person through interaction	AFT-RES	MK	SH	D_BED	P-VIVA,VV-Viva	F&S	III	
Topic 25 AGNI ASSESSMENT BASED ON APACHARA									
CO3,CO4,CO7	Assess agni based on apachara-visesha	PSY-SET	MK	SH	DIS,D_BED	P-VIVA	F&S	III	
CO8	Develop good rapport with patients	AFT-REC	MK	SH	CBL,D_BED	P-VIVA	F&S	III	
Topic 26 TRIVIDHA ROGA VISHESHAVIJNANA IN DIAGNOSIS									
CO4,CO6,CO7	Demonstrate trividha roga visesha vijnana in clinical methods	PSY-SET	MK	SH	DIS,CBL,D	P-VIVA	F&S	III	
CO8	Appreciate the importance of Ayurvedic parameters in clinical methods	AFT-VAL	DK	SH	DIS,CBL,D	P-VIVA	F&S	III	
Topic 27 ASSESSMENT OF UPASAYA AND ANUPASAYA IN PATIENTS									
CO3,CO5,CO6	Identify upasaya-anupasaya in patients	PSY-SET	MK	SH	CBL,D_BED	P-VIVA	F&S	III	
CO8	Appreciate wellness of patients	AFT-REC	DK	SH	D_BED	P-VIVA	F&S	III	

Table 4a: List of Practical (As a part of NHL)

S.No	Name of practical	Term	Activity	Practical hrs
1	SHLOKA PATHANA- 1	1	**Purpose:** To by heart sutras selected from Charakasamhita **Teacher's role:** Teachers should instruct the students to by heart the slokas when the respective portions are over. A log book may be kept by the teacher to mark the date and signature to note the satisfactory recitation of the slokas by the students. The performance of students can be considered for formative assessment. During summative assessment, sloka recitation will be a part of practical examination. **Students role:** To by heart the selected slokas given below and to compile minimum 100 sutras (three terms) **Sutras suggested:** 1. Cha.Su.13- Sneha Adhyaya- 13-17, 22, 57-59 2. Cha.Su.14- Sveda Adhyaya- 4,5,39,40,64 3. Cha.Su.15- Upakalpaneeya Adhyaya – 22 4. Cha.Su.16- Chikitsaprabhritiya Adhyaya - 13-21,27,28,34-36 5. Cha.Su.17- Kiyantashiraseeya Adhyaya- 12, 41-44, 62, 112-118 6. Cha.Su.18-Trisotheeya Adhyaya- 42-43, 44-47 7. Cha.Su.19-Ashtodareeya Adhyaya- 5,6 8. Cha.Su.20- Maharoga adhyaya- 3, 4, 5, 11,14, 17, 20-22 9. Cha.Su.21- Ashtauninditeeya adhyaya- 3,4,16, 18, 19, 35, 50, 58 10. Cha.Su.22- Langhanabrimhaneeya Adhyaya- 9-24 11. Cha.Su.23- Santarpaneeya Adhyaya- 5-7, 26-29 12. Cha.Su.24- Vidhisoniteeya Adhyaya- 14,18,20,21,22,24 13. Cha.Su.25- Yajjapurusheeya Adhyaya- 29,,31,33,45,46,47,50 14. Cha.Su.26- Atreyabhadrakaapyeeya Adhyaya- 13,36,37,61,62,66,81,85,86 15. Cha.Su.27- Annapaanvidhi Adhyaya- 351-352 16. Cha.Su.28- Vividhaasheetapeetiya Adhyaya- 9-19,35-39, 45	10

2	LEARNING THROUGH VYAKHYANA-1	1	**Purpose:** To familiarize and expose the students to the relevant vyakhyana of Charaka Samhita. The following specific portions in the Vyakhyana are selected for this purpose. 1. Cha.Su.20- Maharoga adhyaya - 11,16,19 2. Cha.Su.26- Atreyabhadrakaapyeeya Adhyaya - 13,29 3. Cha.Su.28- Vividhaasheetapeetiya Adhyaya - 7 **Teacher's role:** Teachers will teach those sutras along with the commentary and explain the importance of vyakhyana in better understanding of sutras. **Students' role:** Students will prepare a narrative summary of all the proposed vyakhyanas to highlight their importance in interpreting the sutras. During viva students are asked to interpret the respective sutras along with its vyakhyana.	3
3	OBSERVING THE PRACTICAL UTILITY OF SNEHANA AND SWEDANA	1	**Purpose:** To familiarize commonly available snehayogas and commonly undertaken swedaprayogas. (Ref: Ch Su 13,14) **Teacher's role:** Make five or six groups and instruct them to enlist available ghruta and taila yoga in hospital pharmacy. Enlist the types of swedana followed in panchakarma theatre in the hospital. **Student's role:** Student in groups should document the assigned work in a prescribed format and present to all in the class.	2
4	IDENTIFICATION OF BAHUDOSHA LAKSHANA IN PATIENTS	1	**Purpose:** To assess bahudosha lakshana with the help of proforma in patients posted in hospital wards. (Ref: Ch Su 16/13-16) **Teacher's role:** Teacher should introduce the proforma in the class and guide the students how to furnish the proforma. Teacher may identify patients exhibiting bahudosha lakshana from the ward, those who are posted for Shodhana. Collect the	2

			proformas duly filled by students and analyze the data and discuss with students. **Students' role:** Student should interact with given patient and identify the Bahudosha lakshanas available in the patient and document in the proforma (minimum three cases).	
5	ASSESSMENT OF DISEASES BASED ON TRIVIDHA BODHYA SANGRAHA	1	**Purpose:** To orient students on the use of trividha-bodhya-sangraha (i.e, vikaraprakriti, adhishtana, samuthana) in understanding diseases and thereby enabling them using the unique assessment protocol mentioned in Caraka samhita. (Ref: Ch Su 18/44-47 along with Chakrapani commentary) **Teacher's role:** Introduce the concept of trividha bodhya sangraha, Introduce the case proforma in the class, demonstrate case taking based on trividha-bodhya-sangraha **Students role:** Fill up the observations in the proforma during their routine clinical posting (minimum 3 cases).	2
6	IDENTIFICTION OF ASHTA DOSHA IN STHOULYA	1	**Purpose:** To identify prevalence of ashtadosha of sthaulya in individuals (Ref: Ch Su 21/4) **Teacher's role:** Explain ashtadosha in the class; Introduce the questionnaire to document ashtadosha in individuals; Demonstrate the questionnaire in obese individuals **Students role:** Students will furnish the questionnaire among five people of different age groups and prepare a report based on the findings of the questionnaire survey.	2
7	CLINICAL OBSERVATIONS ON NIJA AGANTUJA RELATIONSHIP	1	**Purpose:** To explore relationship between nija and agantu diseases (Ref: Ch Su 19/7) **Teacher's role:** Teacher explains nija-agantu relationship with examples in the class; Demonstrate some cases where disease starts as agantu and advance to nija and vice versa. **Students' role:** Observe minimum three	2

			cases in OP/IP and make reports to establish the relationship between nija and agantu.	
8	CLINICAL OBSERVATION ON SHADUPAKRAMA	1	**Purpose:** To explore application of shadupakrama in therapeutics (Ref Ch Su 22) **Teacher's role:** After teaching shadupakrama, teachers shall identify some cases in the hospital to demonstrate any one or more upakramas; Try to include cases with varieties of upakrama; Train students to see patients, explore the case sheets and hospital records to find out upakramas adopted to a particular patient. **Students' role:** Observe minimum three cases from hospital and go through case sheets to identify types of upakrama adopte; Interact with interns, teachers to map the upakramas adopted in each patient; Make reports on type of upakrama, nature of medicines used and effects of upakramas based on the above observations; Document observations in three cases	2
9	ASSESSMENT OF RAKTA DUSHTI KARANA IN SPECIFIC CLINICAL CONDITIONS	1	**Purpose:** To identify raktadushtikaranas in cases where raktadushti is suspected (Ref: Ch Su 24/5-10) **Teacher's role:** Teach raktadushti karana; Select some cases where raktadushti is suspected; Demonstrate presence of raktadushti karanas in one or two cases; Assign cases to students to identify presence of raktadushtikarana **Student's role:** Identify presence of raktadushti karanas in three cases with the help of questionnaire provided; Document the observations	2
10	OBSERVATIONS ON USE OF AGRYA AUSHADHA IN CLINICAL PRACTICE	1	**Purpose:** To justify the importance of agryoushadha in clinical practice (Ref: Ch Su 25/38-40) **Teacher's role:** Identify some important agryoushadhas from the list given in Annapanachatushka; Divide the whole class into five or six groups and assign	2

			each group with two or three agrya aushadhas **Students role:** Make monographs of agryoushadha; Interact with practitioners and collect details of use of these aushadhas in routine practice; Document the observations in the record book.	
11	ASSESSMENT OF DHATU-UPADHATU-MALA PRADOSHAJA VIKARAS IN PATIENTS	1	**Purpose:** To identify dhatu-upadhatu-mala pradoshaja vikaras in selected cases. (Ref Ch Su 27/9-22) **Teacher's role:** Demonstrate the proforma in a few cases. **Students' role:** Make five case sheets reporting the findings of the assessment.	3
12	SHLOKA PATHANA- 2	2	See Practical.1 for instructions **Sutras suggested:** 1. Cha.Su.30-Arthedashamahamooleeyam Adhyaya - 3,4,10,11,12 2. Cha.Ni.01-Jwara nidana Adhyaya-3,5,7,8,9,10,11,38-40 3. Cha.Ni.02-Raktapitta nidana Adhyaya- 19,27 4. Cha.Ni.04-Prameha nidana adhyaya-3, 4, 48-49 5. Cha.Ni.05- Kushta nidana Adhyaya-3,4,5,8 6. Cha.Ni.06-Shosha nidana Adhyaya-3, 5,7,9,11,14 7. Cha.Ni.07- Unmada nidana Adhyaya-5,19-22 8. Cha.Ni.08- Apasmara nidana adhyaya- 3,5,17-22, 33-35,37-39 9. Cha.Sha.1-Katithapurusheeya Adhyaya- 16-23, 28-30,36, 63, 64,70-74, 98,102,109,137-139, 148,149 10. Cha.Sha.02-Atulyagothreeyam Adhyaaya- 26, 27, 35,44,45-47 11. Cha.Sha.03-Khuddika garbhavakranti Adhyaya- 17 12. Cha.Sha.04-Mahatee garbhavakranti Adhyaya- 6,36 13. Cha.Sha.05-Purushavichaya Shareera Adhyaya- 3, 5, 8,16	10

			14. Cha.Sha.06-Sareeravichaya adhyaya-4, 5-11, 12,13, 17, 28, 30 15. Cha.Sha.07- Sareerasankhya sareera Adhyaya	
13	LEARNING THROUGH VYAKHYANA-2	2	See Practical No.2 for instructions **Suggested sutras:** 1. Cha.Ni. 4-Prameha nidana adhyaya -4 2. Cha.Sha.1-Katithapurusheeya Adhyaya-21 3. Cha.Sha. 6- Sareeravichaya adhyaya -9-11	3
14	CASE TAKING IN RELATION TO NIDANA PANCHAKA	2	**Purpose:** To map the disease process through nidana-panchaka (Ref: Ch Ni 1) **Teacher's role:** Demonstrate the case proforma in patients; Assign five patients to students for documenting nidanapanchaka **Students role:** Furnish the case proforma in five patients	12
15	DIFFERENTIAL DIAGNOSIS OF SKIN DISEASES BASED ON GUIDELINES ONKUSHTA	2	**Purpose:** To familiarize differential diagnosis of kushta through Ayurvedic parameters (Ref: Ch Ni 5) **Teacher's role:** Demonstrate case taking in a few cases **Students role:** Furnish the case proforma for minimum three cases of skin diseases	2
16	PRAMANA PARIKSHA	2	**Purpose:** To familiarize Ayurvedic methods of physiometry (Ref: Ch Sha 7) **Teacher's role:** Preparing measurement methods based on anguleeprmana and anjaleepramana as explained in Ayurveda; Demonstrating such methods in healthy individuals **Students role:** Assessing physiometry based on the guidelines given by the treacher in three individuals/peers and document the observations	2
17	IDENTIFICATION OF VIKARAVIGHATA BHAVA ABHAVA IN PATIENTS	2	**Purpose:** To explore concept of vikara-vighata-bhava-abhava in clinical scenario. (Ref: Ch Ni 4/3 along with Chakrapani commentary)	2

			Teachers role: Divide class into four or five groups and assign most commonly seen diseases to each group (Eg. Prameha); Conduct group discussions to identify risk factors / protective factors of respective diseases through literature review, interaction with peers and teachers; Sum up findings of group discussions and prepare check list for each disease **Student's role:** Conduct group discussions to identify risk/protective factors of disease assigned to them; Prepare check list for each disease regarding probable risk/protective factors; Identify presence/absence of items in the check list in minimum of three cases of the respective disease	
18	EXPLORATION OF LOKA PURUSHA SAMYA VADA IN THE BACK GROUND OF ONE HEALTH	2	**Purpose:** To explore loka-purusha-samya in the background of one health movement (Ref: Ch Sha 5) **Teacher's role:** Conduct discussions in the class to identify how nature is related to human being; Explore this relationship in the background of concept of one health; conduct discussions **Students role:** Conduct the discussions and prepare a summary report	2
19	SHLOKA PATHANA-3	3	Refer Practical No.1 for instructions **Sutras suggested:** 1. Cha.Vi. 01- Rasa vimaana Adhyayam-10,24 2. Cha.Vi. 02-Trividha kuksheeya Adhyayam-15-18 3. Cha.Vi. 04-Trividha roga vishesha vijnyaneeya adhyaya-4,12 4. Cha.Vi. 05- Sroto vimana Adhyaya-3,4,7,9-27 5. Cha.Vi. 06-Roganika vimana adhyaya -19 6. Cha.Vi. 07- Vyadhita rupeeya vimana Adhyaya-28 7. Cha.Vi. 08-Rogabhishagjiteeyam Adhyaayam-3,6,68-78 8. Cha.In.5-Purvarupeeyam Indriyam Adhyaya-43 9. Cha.In.11-Anujyotiyam Indriya	10

			Adhyaya-29	
20	LEARNING THROUGH VYAKHYANA-3	3	Refer Practical No.2 for instructions **Sutras suggested:** 1. Cha.Vi.01- Rasa vimaana Adhyayam -10 2. Cha.Vi.08- Rogabhishagjiteeyam Adhyaayam-68 -80	3
21	LEARNING THROUGH SAMBHASHA PARISHAD	3	**Purpose:** To familiarize the method of Sambhasha parishad in bringing out scientific discussions. (Ref: Ch Vi 8) **Teacher's role:** Prepare guidelines for conducting Sambhasha parishat as per descriptions in Vadamarga; Demonstrate parishat in the class either through a video demonstration or otherwise; Divide the class into four or five groups and assign one topic each for them; Evaluate the group presentations based on the guidelines **Student's role:** Each group will prepare and demonstrate a parishat in the subject concerned; Prepare summary of the parishat **Suggested topics:** 1. Relevance of Daivavyapasraya cikitsa 2. Rakta as fourth dosha 3. Relevance of food classification 4. Specific agrya related to vihara (Eg: vishado rogavardhananam) 5. Importance of naming of disease 6. Relevance of viruddha ahara	6
22	SROTAS PROFORMA	3	**Purpose:** To assess status of srotodushti in different clinical conditions (Ref: Ch Vi 5) **Teacher's role:** Demonstrate the proforma for assessment of srotas in clinical conditions **Students role:** Furnish the srotas proforma in at least three cases	2
23	LEARNING THROUGH TANTRA YUKTI	3	**Purpose:** Demonstrate use of tantrayukti in different sutras **Teachers role:** Identify and demonstrate application of tanrayukti in different sutras	5

			Student's role: Identify tantrayukti and prepare summary on justifying importance of tantrayukti in selected sutras **Suggested Tantrayuktis**: 1. Adhikaran - commonly seen in many sutras 2. Yoga - commonly seen in many sutras 3. Padartha - commonly seen in many sutras 4. Vakyasesha - commonly seen in many sutras 5. Upadesha - Ca. Su. 13/18-19, Ca. Su. 13/94 6. Niyoga - Ca. Su. 13/34, Ca. Ni. 3/17 7. Apadesha - Ca. Su. 13/13, Ca. Su. 18/44-46, Ca. Su. 26/41, Ca. Ni. 2/12-17 8. Samuchaya - Ca. Su. 13/23-25, Ca. Su. 20/8, Ca. Su. 23/5-7, Ca. Su. 23/27-30, Ca. Ni. 3/7 9. Nidarshana - Ca. Su. 13/96-97, Ca. Su. 17/75(1), Ca. Su. 14/5, Ca. Su. 19/5, Ca. Su. 30/5 10. Nirvachana - Ca. Su. 16/31-32, Ca. Su. 16/34, Ca.Su. 17/95, Ca. Su. 21/9, Ca. Su. 25/4, 11. Ca. Su. 29/4, Ca. Su. 30/5, Ca. Su. 30/12, Ca. Su. 30/24 12. Vidhana - Ca. Su. 15/11, Ca. Su. 15/16, Ca. Su. 16/27 13. Prasanga - Ca. Su. 17/113, Ca. Su. 20/8, Ca. Su. 25/4, Ca. Ni. 1/3, Ca. Sa. 1/118-126 14. Viparyaya - Ca. Su. 25/31, Ca. Sa. 6/6, Ca. Sa. 6/9, Ca. Ni. 3/7, Ca. Ni. 3/9, Ca. Ni. 3/11 15. Ekantika - Ca. Su 15/5, Ca. Su. 20/22, Ca. Su. 21/20, Ca. Su. 25/31, Ca. Su. 30/25, Ca. Ni. 1/32 16. Atitaveksha - Ca. Su. 22/31, Ca. Su. 28/25-30 17. Anagataveksha - Ca. Su. 15/5, Ca. Su. 28/30, Ca. Vi. 8/93, Ca. Vi. 8/135, Ca. Vi. 8/136 18. Swasangya - Ca. Su. 30/3 19. Prayojana - Ca. Su. 30/26, Ca. Sa. 5/5 20. Anumata - Ca. Su. 26/64-65, Ca. Su. 16/28, Ca. Sa. 1/16 21. Vikalpa - Ca. Su. 26/105 22. Pradesha - Ca. Su. 27/329, Ca. Vi. 8/137	

			23. Sambhava - Ca. Su. 28/45 24. Hetwartha - Ca. Ni. 2/21, Ca. Ni. 4/4, Ca. Ni. 7/28, Ca. Vi. 3/40 25. Atidesha - Ca. Sa. 6/11 26. Apavarga - Ca. Su. 26/106 27. Uddhara - Ca. Su. 25/29 28. Anaikantika - Ca. Su. 15/4 29. Pratyutsara and Uddhara - Ca. Su. 25/10-28 30. Nirnaya - Ca. Su. 25/29 31. Apavarga - Ca. Vi. 1/10	
24	ASSESSMENT OF HEALTH THROUGH DHATU SAMYA PAREEKSHA	3	**Purpose:** To assess health status of a person based on dhatusamya pareeksha. (Ref: Ch Vi 8/89) **Teacher's role:** Demonstrate use of proforma in healthy subjects **Students role:** Assess dhatusamya in ten individuals using the proforma	2
25	AGNI ASSESSMENT BASED ON APACHARA	3	**Purpose:** To familiarise the assessment of agni based on apacara-visesha (Ref: Ch Vi 6/12) **Teacher's role:** Explain the concept of agnipareeksha based on apacharavisesha; Demonstrate the questionnaire in a few subjects **Students role:** Assess agni of ten individuals using the proforma	2
26	TRIVIDHA ROGA VISHESHAVIJNANA IN DIAGNOSIS	3	**Purpose:** To justify the role of trividha-rogavisesha vijnana (pratyaksha, anumana and aptopadesa) in clinical methods. (Ref: Ch Vi 4) **Teacher's role:** Demonstrate the use of pratyaksha, anumana and aptopadesa in case taking, stressing on use of sense organs (smell, touch, vision and sound), methods of inference and importance of aptopadesa (writing respective references relevant in a particular case); Assigning cases to demonstrate the above methods **Students role:** Prepare reports on application of trividha visesha vijnana in three cases	3

27	ASSESSMENT OF UPASAYA AND ANUPASAYA IN PATIENTS	3	**Purpose:** To justify importance of upasaya and anupasaya clinical examination (Ref: Ch Ni 1 with Chakrapani commentary) **Teacher's role:** Demonstrate identification of upasaya and anupasaya in selected cases **Students role:** Identify upasaya and anupasaya in a minimum of three cases and document it	2
			Total Hr	**100**

Activity

CO	Topic name	Activity Details	Hours #
CO5,CO7	Cha.Su.15-Upakalpaneeya Adhyaya	**Expert Lecture on Aturalaya:** This activity will evoke an interest among students about planning for construction of Hospitals and Nursing homes. Topic: Standard guidelines to setup Ayurveda Clinics, Nursing Homes and Hospitals.	1
CO6,CO7,CO8	Cha.Su.19-Ashtodareeya Adhyaya	**Activity on Disease classification:** Teacher should give an insight to NAMASTE portal published by Ministry of AYUSH. Students should go through with every standardised Ayurveda terminologies related to disease classification and also National Ayurveda Morbidity codes.	2
CO4,CO6,CO8	Cha.Su.20- Maharoga adhyaya	**Compilation/ Making monograph on Nanatmaja vikara:** Steps (1) Teacher should make teams of 3-5 students.(2) An Editorial team for making monograph has to be made including experts of Roga Nidana. (3) Divide the 140 diseases into available number of teams. (4) Teacher should provide a format to collect data on each diseases which must include pictorial representation of disease and cross references. (5) The Editorial team will collect the data from all teams and edit in the form of a	3

		book. (6) The content should be reviewed by Experts and made as E-Monograph (PDF)/ Book.	
CO4,CO7	Cha.Su.21- Ashtauninditeeya adhyaya	**Video making on concept of Nidra:** Steps (1) Teacher should explain the content on which students should make video (2) The Minimum duration of Video should be 3 minutes. (3) Video can be in regional languages. (4) Teacher should select the best videos and can publish in social media after rectifying the content of the video.	1
CO4,CO5,CO7	Cha.Su.25- Yajjapurusheeya Adhyaya	**Justifying concept of Hita and Ahita ahara:** Steps (1) Students should be divided in to groups and assign some of the Hita and Ahita ahara dravya (2) Student should find and discuss the logical explanations on justifying the given dravya as Hita or Ahita	2
CO4,CO5,CO7	Cha.Su.26- Atreyabhadrakaapyeeya Adhyaya	**Application of paradi guna:** Steps (1) Any probable drug or treatment plan to be selected and assign to various groups (2) Students should view them through paradi guna and document it.	2
CO5,CO8	Cha.Su.27- Annapaanvidhi Adhyaya	**Collection of different dravya's:** Steps (1) Student should collect different dravya's available in their locality. (2) Student should exhibit the same and discuss with experts. (3) Document opinion given by experts.	2
CO4,CO8	Cha.Su.29- Dashapraanaayataneeya Adhyaya	**Skit on different types of vaidya in relation to medical ethics:** Steps (1) The class has to be divided into teams and they should be assigned to write a story for skit, considering different qualities of vaidya (2) They should perform the skit after Screening done by concerned teachers	2
CO4,CO6	Cha.Ni. 08- Apasmara nidana adhyaya	**Documentation of Nidanarthakara roga:** Student should discuss and document the experiences of practising physicians of their	2

		Hospital or outside about Nidanarthakara roga.	
CO3,CO4,CO6,CO7	Cha.Ni. 08- Apasmara nidana adhyaya	**Quiz on Nidana sthana:** Steps (1) Teacher should give a written test including important multiple choice questions of nidana sthana. (2) The highest scoring students should be selected and made into different teams as per the convenience. (3) The selected students should be conducted quiz with different rounds considering the content of the Nidana sthana.	2
CO3,CO4,CO7	Cha.Sha.1-Katithapurusheeya Adhyaya.	**Game on Ashta smruti karana:** Steps (1) Plan the Memory check games by using Different materials such as Drugs, Books and instruments.(2) Students should be subjected for memory check sessions. (3) Later their experiences should be interpreted through Ashta smruti karana.	2
CO4,CO6,CO7	Cha.Sha. 04- Mahatee garbhavakranti Adhyaya	**Identify film/Tv serial characters having different qualities of Trividha satwa and their varieties:** Steps (1) Students has to be divided into teams and each team should be assigned some of the satwa. (2) The team should collect the video clips of those characters and has to present to all after getting scrutinized by teachers.	2
CO4,CO8	Cha.Sha. 05- Purushavichaya Adhyaya	**Adopting pravrutti and nivrutti upayas in present era:** Steps (1) Teacher should make teams and assign different pravrutti and nivrutti upayas.(2) Team should present the pravrutti and nivrutti upayas considering relevance in present era.	2
CO4,CO7,CO8	Cha.Sha. 06- Sareeravichaya adhyaya	**Analysing Data on causes of akala mrutyu:** Students should search and collect data from online sources published by Govt or Private Authorities about the causes of Akala mrutyu. Analyse and present the data and discuss on Akala mrutyu in the class.	2

CO4,CO7	Cha.Sha.08- Jathisutreeya Adhyaya	**Street play on awareness of garbhopaghatakara bhava:** Steps (1) Teacher should make teams and explain about the structure of street play (2) Student should create a narrative story to present the concept in public (3) Minimum duration of the play is 15 minutes	2
CO7,CO8	Cha.Vi.01- Rasa vimaana Adhyayam	**Digital Posters for public awareness on Ahara vidhi:** Steps (1) Teacher should assign the topic to the students individually or in group. (2) Student should make a digital posters or infographics with the help of various online tools such as CANVA etc.	2
CO4,CO7,CO8	Cha.Vi. 03-Janapadodwansaneeya Vimanam Adhyaya	**Short Documentary on any of the Janapadodhwamsakara bhava:** Steps (1) Teacher should guide the students on Janapadodhwamsakara bhava (2) Students should be taught on what is documentaries and should fix the duration of video. (3) Teams should be made and they have to shoot and edit the videos on any of the janapadodhwamsakara bhava. (4) Present the documentaries and share experience.	2
CO4,CO8	Cha.Vi. 8-Rogabhishagjiteeyam Adhyaayam.	**Identifying Adhyayana vidhi:** Steps (1) Teacher should guide the students to identify and document different individual and group learning techniques. (2) Students should present and share experience on their learning techniques	2
CO3,CO4,CO7	Cha.In.5-Purvarupeeyam Indriyam Adhyaya	**Identifying types of swapna:** Steps (1) Teacher should assist to make a Proforma for different types of Swapna. (2) Student should assess the proforma with Healthy individuals or diseased and analyse the Data.	2
CO3,CO4,CO7,CO8	Cha.In.12-Gomayachurniyam Indriya Adhyaya	**Discussion on death signs:** Steps (1) Teacher should assign set of students to interact with	1

		concerned ICU Doctors/ Nurses or assistants. (2) Students should interact with them based on arishta lakshanas and document it.	
CO3,CO6,CO7	Cha.In.01-Varnaswareeya Adhyaya	**Use of various standard tools for assessing factors related to arishta :** Students are assigned with some of the standard tools to assess various fators relevant in arishta-vijnana availale in the following source: https://www.carakasamhitaonline.com/mediawiki-1.32.1/index.php?title=Varnasvariyam_Indriyam_Adhyaya#Assessment_of_complexion	2

Hours indicated are included in calculations of Table 3 and 4

Table 5- Teaching learning method

Sr No	Teaching learning methods in the course	No of Activities
1	Lecture	30
2	Lecture with Power point presentation	17
3	Lecture & Group Discussion	364
4	Lecture with Video clips	20
5	Discussions	37
6	Brainstorming	58
7	Inquiry-Based Learning	14
8	PBL	6
9	CBL	48
10	Project-Based Learning	5
11	TBL	1
12	Team project work	2
13	Flipped classroom	29
14	Blended Learning	9
15	Edutainment	9
16	Mobile learning	7

17	Role plays	15
18	Self-directed learning	105
19	Problem solving method	2
20	Workshops	2
21	Game-Based Learning	4
22	Demo on Model	1
23	Library Session	4
24	Peer learning	6
25	Real life experience	4
26	Recitation	40
27	Presentations	3
28	Case diagnosis	1
29	Drug analysis	4
30	Demonstration	9
31	Demonstration bedside	4
32	Field visit	3

These are overall teaching learning methods listed in Table 3 and 4. Teachers can select the best possible method amongst the given methods as per objective, available time etc.

Table 6: Assessment Summary: Assessment is subdivided in A to H points

6 A-Number of Papers and Marks Distribution

Subject Code	Papers	Theory	Practical/Clinical Assessment					Grand Total
			Practical	Viva	Elective	IA	Sub Total	
AyUG-SA2	1	100	-	75	10 (Set SB)	15	100	200

6 B - Scheme of Assessment (formative and Summative)

PROFESSIONAL COURSE	DURATION OF PROFESSIONAL COURSE		
	First Term (1-6 Months)	Second Term (7-12 Months)	Third Term (13-18 Months)
Second	3 PA & First TT	3 PA & Second TT	3 PA & UE**

PA: Periodical Assessment; **TT:** Term Test; **UE:** University Examinations.

** University Examination shall be on entire syllabus

6 C - Calculation Method for Internal assessment Marks

TERM	PERIODICAL ASSESSMENT*					TERM TEST**	TERM ASSESSMENT	
	A	B	C	D	E	F	G	H
	1 (15 Marks)	2 (15 Marks)	3 (15 Marks)	Average (A+B+C/ 3)	Converted to 15 Marks (D/15*15)	Term Test (Marks converted to 15) (15 Marks)	Sub Total _/30 Marks	Term Ass essment (…./15)
FIRST							E+F	(E+F)/2
SECOND							E+F	(E+F)/2
THIRD						NIL		E
Final IA	Average of Three Term Assessment Marks as Shown in 'H' Column.							
	Maximum Marks in Parentheses *Select an Evaluation Method which is appropriate for the objectives of Topics from the Table 6 D for Periodic assessment. Conduct 15 marks assessment and enter marks in A, B, and C. ** Conduct Theory (100 Marks) (MCQ(20*1 Marks), SAQ(8*5), LAQ(4*10)) and Practical (100 Marks) Then convert total to 15 marks.							

6 D - Evaluation Methods for Periodical Assessment

S. No	Evaluation Methods
1	Activities Indicated in Table 3 - Column G3 as per Indicated I, II or III term in column I3

Evaluation Methods in MSE

1. Practical / Clinical Performance
2. Viva Voce, MCQs, MEQ (Modified Essay Questions/Structured Questions)
3. Open Book Test (Problem Based)
4. Summary Writing (Research Papers/ Samhitas)
5. Class Presentations; Work Book Maintenance
6. Problem Based Assignment
7. Objective Structured Clinical Examination (OSCE), Objective Structured Practical Examination (OPSE), Mini Clinical Evaluation Exercise (Mini-CEX), Direct Observation of Procedures (DOP), Case Based Discussion (CBD)
8. Extra-curricular Activities, (Social Work, Public Awareness, Surveillance Activities, Sports or Other Activities which may be decided by the department).
9. Small Project etc.

6 E Question Paper Pattern

II PROFESSIONAL BAMS EXAMINATIONS
AyUG-SA2
PAPER-1
Time: 3 Hours Maximum Marks: 100
INSTRUCTIONS: All questions compulsory

		Number of Questions	**Marks per question**	**Total Marks**
Q 1	MULTIPLE CHOICE QUESTIONS (MCQ)	20	1	20
Q 2	SHORT ANSWER QUESTIONS (SAQ)	8	5	40
Q 3	LONG ANSWER QUESTIONS (LAQ)	4	10	40
				100

6 F Distribution of theory examination

Paper 1						
Sr. No	**A List of Topics**	**B Term**	**C Marks**	**MCQ (1 Mark)**	**SAQ (5 Marks)**	**LAQ (10 Marks)**
1	**Cha.Su.13- Sneha Adhyaya**	1	37	Yes	Yes	Yes
2	**Cha.Su.14- Sveda Adhyaya**	1		Yes	Yes	Yes
3	**Cha.Su.15- Upakalpaneeya Adhyaya**	1		Yes	Yes	Yes
4	**Cha.Su.16- Chikitsaprabhritiya Adhyaya**	1		Yes	Yes	Yes
5	**Cha.Su.17- Kiyantashiraseeya Adhyaya**	1		Yes	Yes	Yes
6	**Cha.Su.18-Trisotheeya Adhyaya**	1		Yes	Yes	Yes
7	**Cha.Su.19-Ashtodareeya Adhyaya**	1		Yes	Yes	No
8	**Cha.Su.20- Maharoga adhyaya**	1		Yes	Yes	No
9	**Cha.Su.21- Ashtauninditeeya adhyaya**	1		Yes	Yes	Yes
10	**Cha.Su.22- Langhanabrimhaneeya Adhyaya**	1		Yes	Yes	Yes
11	**Cha.Su.23- Santarpaneeya Adhyaya**	1		Yes	Yes	Yes
12	**Cha.Su.24- Vidhishoniteeya Adhyaya**	1		Yes	Yes	Yes
13	**Cha.Su.25- Yajjapurusheeya Adhyaya**	1		Yes	Yes	Yes
14	**Cha.Su.26- Atreyabhadrakaapyeeya Adhyaya**	1		Yes	Yes	Yes
15	**Cha.Su.27- Annapaana vidhi Adhyaya**	1		Yes	Yes	No
16	**Cha.Su.28- Vividhashitapeeteeya Adhyaya**	1		Yes	Yes	Yes

17	**Cha.Su.29- Dashapraanaayataneeya Adhyaya**	2		Yes	Yes	No
18	**Cha.Su.30- Arthedashamahamooleeya Adhyaya**	2		Yes	Yes	Yes
19	**Cha.Ni.01-Jwara nidana Adhyaya**	2	19	Yes	Yes	Yes
20	**Cha.Ni.02-Raktapitta nidana Adhyaya**	2		Yes	Yes	Yes
21	**Cha.Ni.03-Gulma nidana Adhyaya**	2		Yes	Yes	No
22	**Cha.Ni.04-Prameha nidana adhyaya**	2		Yes	Yes	Yes
23	**Cha.Ni.05-Kushta nidana Adhyaya**	2		Yes	Yes	Yes
24	**Cha.Ni.06-Shosha nidana Adhyaya**	2		Yes	Yes	Yes
25	**Cha.Ni.07-Unmada nidana Adhyaya**	2		Yes	Yes	Yes
26	**Cha.Ni.08-Apasmara nidana adhyaya**	2		Yes	Yes	Yes
27	**Cha.Vi.01- Rasa vimana Adhyayam**	3	24	Yes	Yes	Yes
28	**Cha.Vi.02-Trividha kuksheeya Adhyayam**	3		Yes	Yes	Yes
29	**Cha.Vi.03-Janapadodhwansaneeya Vimanam Adhyaya**	3		Yes	Yes	Yes
30	**Cha.Vi.04-Trividha roga vishesha vijnyaneeya adhyaya**	3		Yes	Yes	Yes
31	**Cha.Vi. 05- Sroto vimana Adhyaya**	3		Yes	Yes	Yes
32	**Cha.Vi. 06-Roganika vimana adhyaya**	3		Yes	Yes	Yes
33	**Cha.Vi. 07- Vyadhita rupeeya vimana Adhyaya**	3		Yes	Yes	Yes

34	**Cha.Vi. 08-Rogabhishagjiteeyam Adhyaayam.**	3		Yes	Yes	Yes
35	**Cha.Sha.01-Katithapurusheeya Adhyaya**	2	13	Yes	Yes	No
36	**Cha.Sha.02-Atulyagothreeyam Adhyaaya**	2		Yes	Yes	No
37	**Cha.Sha.03-Khuddika garbhavakranti Adhyaya**	2		Yes	Yes	No
38	**Cha.Sha.04-Mahatee garbhavakranti Adhyaya**	2		Yes	Yes	Yes
39	**Cha.Sha.05-Purushavichaya Shareera Adhyaya**	2		Yes	Yes	No
40	**Cha.Sha.06-Sareeravichaya adhyaya**	2		Yes	Yes	No
41	**Cha.Sha.07- Sareerasankhya sareera Adhyaya**	2		Yes	Yes	No
42	**Cha.Sha.08-Jathisutreeya Adhyaya**	2		Yes	Yes	No
43	**Cha.In.1-Varnasvariyam Indriya Adhyaya**	3	7	Yes	Yes	No
44	**Cha.In.2-Pushpitakam Indriya Adhyaya**	3		Yes	No	No
45	**Cha.In.3-Parimarshaneeyam Indriyam Adhyaya**	3		Yes	No	No
46	**Cha.In.4-Indriyaneekam Indriya adhyaya**	3		Yes	No	No
47	**Cha.In.5-Purvarupeeyam Indriyam Adhyaya**	3		Yes	Yes	No
48	**Cha.In.6-Katamanisharireeyam Indriyam Adhyaya**	3		Yes	No	No
49	**Cha.In.7-Pannarupiyam Indriyam Adhyaya**	3		Yes	Yes	No
50	**Cha.In.8-Avakshiraseeyam Indriyam**	3		Yes	No	No

	Adhyaya					
51	**Cha.In.9-Yasya shyavanimittiya Indriya Adhyaya**	3		Yes	No	No
52	**Cha.In.10-Sadyomaraneeyam Indriya Adhyaya**	3		Yes	Yes	No
53	**Cha.In.11-Anujyotiyam Indriya Adhyaya**	3		Yes	Yes	No
54	**Cha.In.12-Gomayachurniyam Indriya Adhyaya**	3		Yes	Yes	No
Total Marks			**100**			

6 G Blue print of paper I

Paper No:1		
Question No	**Type of Question**	**Question Paper Format**
Q1	**Multiple choice Questions** **20 Questions** **1 mark each** **All compulsory** **Must know part - 15 MCQ** **Desirable to know - 3 MCQ** **Nice to know part - 2 MCQ**	**1.** Cha.Su.13- Sneha Adhyaya / Cha.Su.14- Sveda Adhyaya **2.** Cha.Su.17- Kiyantashiraseeya Adhyaya / Cha.Su.15- Upakalpaneeya Adhyaya **3.** Cha.Su.20- Maharoga adhyaya / Cha.Su.18-Trisotheeya Adhyaya / Cha.Su.19-Ashtodareeya Adhyaya **4.** Cha.Su.22- Langhanabrimhaneeya Adhyaya / Cha.Su.21- Ashtauninditeeya adhyaya **5.** Cha.Su.23- Santarpaneeya Adhyaya / Cha.Su.24- Vidhishoniteeya Adhyaya **6.** Cha.Su.28- Vividhashitapeeteeya Adhyaya / Cha.Su.26- Atreyabhadrakaapyeeya Adhyaya / Cha.Su.25- Yajjapurusheeya Adhyaya **7.** Cha.Su.30- Arthedashamahamooleeya Adhyaya / Cha.Su.29- Dashapraanaayataneeya Adhyaya **8.** Cha.Ni.02-Raktapitta nidana Adhyaya / Cha.Ni.01-Jwara nidana Adhyaya **9.** Cha.Ni.04-Prameha nidana adhyaya / Cha.Ni.03-Gulma nidana Adhyaya **10.** Cha.Ni.05-Kushta nidana Adhyaya / Cha.Ni.06-Shosha nidana Adhyaya **11.** Cha.Ni.08-Apasmara nidana adhyaya / Cha.Ni.07-Unmada nidana Adhyaya **12.** Cha.Vi.02-Trividha kuksheeya Adhyayam / Cha.Vi.03-Janapadodhwansaneeya Vimanam Adhyaya / Cha.Vi.01- Rasa vimana Adhyayam **13.** Cha.Vi.04-Trividha roga vishesha vijnyaneeya adhyaya / Cha.Vi. 05- Sroto vimana Adhyaya **14.** Cha.Vi. 06-Roganika vimana adhyaya / Cha.Vi. 07- Vyadhita rupeeya vimana Adhyaya **15.** Cha.Vi. 08-Rogabhishagjiteeyam Adhyaayam. **16.** Cha.Sha.02-Atulyagothreeyam Adhyaaya / Cha.Sha.01-Katithapurusheeya Adhyaya **17.** Cha.Sha.04-Mahatee garbhavakranti Adhyaya / Cha.Sha.03-Khuddika garbhavakranti Adhyaya / Cha.Sha.05-Purushavichaya Shareera Adhyaya **18.** Cha.Sha.07- Sareerasankhya sareera Adhyaya

		/ Cha.Sha.06-Sareeravichaya adhyaya / Cha.Sha.08-Jathisutreeya Adhyaya **19.** Cha.In.1-Varnasvariyam Indriya Adhyaya / Cha.In.2-Pushpitakam Indriya Adhyaya / Cha.In.4-Indriyaneekam Indriya adhyaya / Cha.In.5-Purvarupeeyam Indriyam Adhyaya **20.** Cha.In.9-Yasya shyavanimittiya Indriya Adhyaya / Cha.In.11-Anujyotiyam Indriya Adhyaya / Cha.In.8-Avakshiraseeyam Indriyam Adhyaya / Cha.In.12-Gomayachurniyam Indriya Adhyaya
Q2	**Short answer Questions** **Eight Questions** **5 Marks Each** **All compulsory** **Must know - 7 SAQ** **Desirable to know - 1 SAQ** **No questions on Nice to know**	**1.** Cha.Su.13- Sneha Adhyaya / Cha.Su.14-Sveda Adhyaya / Cha.Su.16-Chikitsaprabhritiya Adhyaya / Cha.Su.20-Maharoga adhyaya / Cha.Su.18-Trisotheeya Adhyaya / Cha.Su.17- Kiyantashiraseeya Adhyaya / Cha.Su.15- Upakalpaneeya Adhyaya / Cha.Su.19-Ashtodareeya Adhyaya **2.** Cha.Su.28- Vividhashitapeeteeya Adhyaya / Cha.Su.26- Atreyabhadrakaapyeeya Adhyaya / Cha.Su.25- Yajjapurusheeya Adhyaya / Cha.Su.22- Langhanabrimhaneeya Adhyaya / Cha.Su.23- Santarpaneeya Adhyaya / Cha.Su.24- Vidhishoniteeya Adhyaya / Cha.Su.21- Ashtauninditeeya adhyaya / Cha.Su.30- Arthedashamahamooleeya Adhyaya / Cha.Su.29- Dashapraanaayataneeya Adhyaya / Cha.Su.27- Annapaana vidhi Adhyaya **3.** Cha.Ni.04-Prameha nidana adhyaya / Cha.Ni.05-Kushta nidana Adhyaya / Cha.Ni.03-Gulma nidana Adhyaya / Cha.Ni.08-Apasmara nidana adhyaya / Cha.Ni.02-Raktapitta nidana Adhyaya / Cha.Ni.06-Shosha nidana Adhyaya / Cha.Ni.01-Jwara nidana Adhyaya / Cha.Ni.07-Unmada nidana Adhyaya **4.** Cha.Vi.04-Trividha roga vishesha vijnyaneeya adhyaya / Cha.Vi.02-Trividha kuksheeya Adhyayam / Cha.Vi.03-Janapadodhwansaneeya Vimanam Adhyaya / Cha.Vi.01- Rasa vimana Adhyayam **5.** Cha.Vi. 08-Rogabhishagjiteeyam Adhyaayam. / Cha.Vi. 06-Roganika vimana adhyaya / Cha.Vi. 05- Sroto vimana Adhyaya / Cha.Vi. 07- Vyadhita rupeeya vimana Adhyaya

		6. Cha.Sha.02-Atulyagothreeyam Adhyaaya / Cha.Sha.01-Katithapurusheeya Adhyaya / Cha.Sha.04-Mahatee garbhavakranti Adhyaya / Cha.Sha.03-Khuddika garbhavakranti Adhyaya **7.** Cha.Sha.07- Sareerasankhya sareera Adhyaya / Cha.Sha.06-Sareeravichaya adhyaya / Cha.Sha.08-Jathisutreeya Adhyaya / Cha.Sha.05-Purushavichaya Shareera Adhyaya **8.** Cha.In.11-Anujyotiyam Indriya Adhyaya / Cha.In.1-Varnasvariyam Indriya Adhyaya / Cha.In.7-Pannarupiyam Indriyam Adhyaya / Cha.In.10-Sadyomaraneeyam Indriya Adhyaya / Cha.In.12-Gomayachurniyam Indriya Adhyaya / Cha.In.5-Purvarupeeyam Indriyam Adhyaya
Q3	**Long answer Questions** **Four Questions** **10 marks each** **All compulsory** **All questions on must know. No Questions on Nice to know and Desirable to know**	**1.** Cha.Su.13- Sneha Adhyaya / Cha.Su.14-Sveda Adhyaya / Cha.Su.16-Chikitsaprabhritiya Adhyaya / Cha.Su.18-Trisotheeya Adhyaya / Cha.Su.17-Kiyantashiraseeya Adhyaya / Cha.Su.15-Upakalpaneeya Adhyaya **2.** Cha.Su.28- Vividhashitapeeteeya Adhyaya / Cha.Su.26- Atreyabhadrakaapyeeya Adhyaya / Cha.Su.25- Yajjapurusheeya Adhyaya / Cha.Su.22- Langhanabrimhaneeya Adhyaya / Cha.Su.23- Santarpaneeya Adhyaya / Cha.Su.24- Vidhishoniteeya Adhyaya / Cha.Su.21- Ashtauninditeeya adhyaya / Cha.Su.30- Arthedashamahamooleeya Adhyaya **3.** Cha.Ni.04-Prameha nidana adhyaya / Cha.Ni.05-Kushta nidana Adhyaya / Cha.Ni.08-Apasmara nidana adhyaya / Cha.Ni.02-Raktapitta nidana Adhyaya / Cha.Ni.06-Shosha nidana Adhyaya / Cha.Ni.01-Jwara nidana Adhyaya / Cha.Ni.07-Unmada nidana Adhyaya **4.** Cha.Vi.04-Trividha roga vishesha vijnyaneeya adhyaya / Cha.Vi.02-Trividha kuksheeya Adhyayam / Cha.Vi. 08-Rogabhishagjiteeyam Adhyaayam. / Cha.Vi. 06-Roganika vimana adhyaya / Cha.Vi.03-Janapadodhwansaneeya Vimanam Adhyaya / Cha.Vi. 05- Sroto vimana Adhyaya / Cha.Vi. 07- Vyadhita rupeeya vimana Adhyaya / Cha.Vi.01- Rasa

		vimana Adhyayam

6 H Distribution of Practical Exam

S.No	Heads	Marks
1	Viva on Practical record	10
2	Shloka recitation	10
3	Viva on vyakhyana	5
4	Viva on Sutrasthana	20
5	Viva on Nidanasthana	10
6	Viva on Vimanasthana	10
7	Viva on Shareerasthana	5
8	Viva on Indriyasthana	5
9	Electives (Set SB)	10
10	IA	15
Total Marks		**100**

References Books/ Resources

S.No	Book	Resources
1	Charakasamhita with Cakrapani Commentary	Yadavji Trikamji, editor. Agnivesha. Charaka Samhita. Ayurveda Dipika. Chakrapanidatta (comm)(Sanskrit) Varanasi: Chaukambha Sanskrit Sansthan
2	Charak Samhita (English Commentary)	Ram Karan Sharma and Bhagawan Dash, editor. Charak Samhita (English Commentary): Varanasi: Chowkambha Sanskrit Series
3	Charak Samhita (Hindi commentary)	Harishchandra Singh Kushvaha, editor and translator. Charak Samhita (Hindi Commentary): Varanasi: Chaukambha Orientalia
4	Charak Samhita (Hindi commentary)	Jayadev Vidyalankar, editor. Charak Samhita (Hindi commentary): Motilal Banarsi Dass Publishers Pvt. Ltd
5	Charak Samhita (Hindi commentary): Vaidya Atridev Vidyalankar	Charak Samhita (Hindi commentary): Vaidya Atridev Vidyalankar
6	Charak Samhita (Hindi commentary)	Gorakhanath Chaturvedi and Kashinath Pandeya Shastri, editor. Charak Samhita (Hindi commentary): Varanasi: Chaukhambha Bharati Academy
7	Charak Samhita (Hindi commentary)	Brahmanand Tripathi, editor. Charak Samhita (Hindi commentary):Varanasi: Chaukhamba Surbharati Prakashan
8	Charak Samhita (Hindi commentary): Dr. Ravidatta Tripathi	Vidyadhar Shukla and Ravidatta Tripathi Charak Samhita (Hindi commentary): Varanasi: Chaukhamba Sanskrit Pratishtan
9	Charaka Samhita (Hindi commentary)	Banwari Lal Gaur, editor. Charaka Samhita (Hindi commentary): Rashtriya Ayurved Vishwavidyalaya
10	Legacy of Caraka	M S Valiathan, Legacy of Caraka (English): Hyderabad: Orient Longman
11	Charakasamhita	Charak e-Samhita –National Institute of Indian Medical Heritage – http://niimh.nic.in/ebooks/ecaraka
12	Charakasamhita	Charakasamhitaonline.com - www.carakasamhitaonline.com
13	Illustrated Carakasamhita, Dr. R Vidyanath	R Vidyanath, editor. Illustrated Carakasamhita (English Commentary): Varanasi Chaukhambha Prakashak
14	Namaste Portal	NAMASTE - Portal (ayush.gov.in)
15	CCRAS Prakriti tool	CCRAS Prakriti Tool http://www.ccras.res.in/
16	Sanskrit English Dictionary	Monnier Williams. A Sanskrit English Dictionary. Delhi. Motilal Banarsidasspublishers Pvt Ltd.

17	Shabdakalpadruma	Raja Radha Kanta Deva, Shabda Kalpa Drum: Varanasi: Chowkhamba Sanskrit Series Office
18	Vaidyak Shabda Sindhu	Kaviraj Shri Nagendra Nath Sen Vaidya Shastri, Vaidyak Shabda Sindhu: Varanasi: Chowkhamba Orientalia

Assessment

S.No	Short form	Discription
1	T-EMI	Theory extended matching item
2	T- EW	Theory Essay writing
3	T- MEQs	Theory MEQs
4	T-CRQs	Theory CRQs
5	T-CS	Theory case study
6	T-OBT	Theory open book test
7	P-VIVA	Practical Viva
8	P-REC	Practical Recitation
9	P-EXAM	Practical exam
10	PRN	Presentation
11	P-PRF	Practical Performance
12	P-SUR	Practical Survey
13	P-EN	Practical enact
14	P-RP	Practical Role play
15	P-MOD	Practical Model
16	P-POS	Practical Poster
17	P-CASE	Practical Case taking
18	P-ID	Practical identification
19	P-PS	Practical Problem solving
20	QZ	Quiz
21	PUZ	Puzzles
22	CL-PR	Class Presentation,
23	DEB	Debate
24	WP	Word puzzle
25	O-QZ	Online quiz

26	O-GAME	Online game-based assessment
27	M-MOD	Making of Model
28	M-CHT	Making of Charts
29	M-POS	Making of Posters
30	C-INT	Conducting interview
31	INT	Interactions
32	CR-RED	Critical reading papers
33	CR-W	Creativity Writing
34	C-VC	Clinical video cases,
35	SP	Simulated patients
36	PM	Patient management problems
37	CHK	Checklists
38	OSCE	OSCE
39	OSPE	OSPE,
40	Mini-CEX	Mini-CEX
41	DOPS	DOPS
42	CWS	CWS
43	RS	Rating scales
44	RK	Record keeping
45	COM	Compilations
46	Portfolios	Portfolios
47	Log book	Log book
48	TR	Trainers report
49	SA	Self-assessment
50	PA	Peer assessment
51	360D	360-degree evaluation
52	TT-Theory	Theory
53	PP-Practical	Practical
54	VV-Viva	Viva

Domain

S.No	Short form	Discription
1	CK	Cognitive/Knowledge
2	CC	Cognitive/Comprehension
3	CAP	Cognitive/Application
4	CAN	Cognitive/Analysis
5	CS	Cognitive/Synthesis
6	CE	Cognitive/Evaluation
7	PSY-SET	Psychomotor/Set
8	PSY-GUD	Psychomotor/Guided response
9	PSY-MEC	Psychomotor/Mechanism
10	PSY-ADT	Psychomotor Adaptation
11	PSY-ORG	Psychomotor/Origination
12	AFT-REC	Affective/ Receiving
13	AFT-RES	Affective/Responding
14	AFT-VAL	Affective/Valuing
15	AFT-SET	Affective/Organization
16	AFT-CHR	Affective/ characterization

T L method

S.No	Short form	Discription
1	L	Lecture
2	L&PPT	Lecture with Power point presentation
3	L&GD	Lecture & Group Discussion
4	L_VC	Lecture with Video clips
5	DIS	Discussions
6	BS	Brainstorming
7	IBL	Inquiry-Based Learning
8	PBL	PBL
9	CBL	CBL
10	PrBL	Project-Based Learning
11	TBL	TBL
12	TPW	Team project work
13	FC	Flipped classroom
14	BL	Blended Learning
15	EDU	Edutainment
16	ML	Mobile learning
17	ECE	ECE
18	SIM	Simulation
19	RP	Role plays
20	SDL	Self-directed learning
21	PSM	Problem solving method
22	KL	Kinesthetic Learning
23	W	Workshops
24	GBL	Game-Based Learning
25	D-M	Demo on Model

26	LS	Library Session
27	PL	Peer learning
28	RLE	Real life experience
29	REC	Recitation
30	SY	Symposium
31	TUT	Tutorial
32	PER	Presentations
33	PT	Practical
34	XRay	X ray identification
35	CD	Case diagnosis
36	LRI	Lab report interpretation
37	DA	Drug analysis
38	D	Demonstration
39	D_BED	Demonstration bedside
40	D_L	Demonstration Lab
41	DG	Demonstration Garden
42	FV	Field visit
43	PRA	Practical

AYURVEDACHARYA (B.A.M.S.)

SECOND PROFESSIONAL B.A.M.S.

SAMHITA ADHYAYAN-2

(STUDY OF AYURVEDA CLASSICAL TEXT)

(SUBJECT CODE : AyUG-SA2)

JOURNAL /ACTIVITY BOOK

Name of the student : _____

Institutional Roll No. : _____

Examination Reg. No. : _____

Academic Year : _____

(Name of the College)

(Approved by –National Commission for Indian System of Medicines, New Delhi &

Name of the University)

Name of the department

Batch- _____

Certificate

This is to certify that, Mr. / Ms. _____, Enrollment Number- _____ has satisfactorily completed the course of Practicals in (Subject Name) prescribed by the (Name of University) as a part of the Second Professional B.A.M.S. Course.

Examination Seat No.: _____

Date of Examination- _____

Sign. Of Internal Examiner-_____

Sign. Of External Examiner-_____

Sign. of Teacher

Sign. of H.O.D.

JOURNAL /ACTIVITY BOOK

SAMHITA ADHYAYAN-2

(STUDY OF AYURVEDA CLASSICAL TEXT)

(SUBJECT CODE : AyUG - SA-1)

Journal Cum Activity Book

DEPARTMENT OF

SAMHITA, SIDDHANTA & SAMSKRITAM,

Name of the College

INDEX

Sr. No.	Topic	Date	Page no.
1	Shlokapathana – 1		
2	Learning through vyakhyana-1		
3	Observing the practical utility of snehana and swedana		
4	Identification of bahudosha lakshana in patients		
5	Assessment of diseases based on trividha bodhyasangraha		
6	Identifiction of ashta dosha in sthoulya		
7	Clinical observations on nija-agantuja relationship		
8	Clinical observation on shadupakrama		
9	Assessment of raktadushti karana in specific clinical conditions		
10	Observations on use of agrya aushadha in clinical practice		
11	Assessment of dhatu-upadhatu-mala-pradoshajavikaras in patients		
12	Shloka pathana- 2		
13	Learning through vyakhyana-2		
14	Case taking in relation to nidanapanchaka		
15	Differential diagnosis of skin diseases with guidelines on kushta		
16	Pramana pariksha		
17	Identification of vikaravighata bhavaabhava in patients		
18	Exploration of lokapurusha samya vada in the back ground of one health		
19	Shloka pathana-3		
20	Learning through vyakhyana-3		
21	Learning through sambhasha parishad		
22	Srotas proforma		
23	Learning through tantra yukti		
24	Assessment of health through dhatusamya pareeksha		
25	Agni assessment based on apachara		
26	Trividha rogavisheshavijnana in diagnosis		
27	Assessment of upasaya and anupasaya inpatients		

PRACTICAL NO. 1, 12, 19
SLOKAPATHANA

(Minimum 50 sutras selected from the list
given in Table 4a of the syllabus)

No. **Sutra Reference:**

Sutra:
Meaning:

No. **Sutra Reference**

Sutra:
Meaning:

Recited by student on:

Signature of the teacher:

PRACTICAL NO. 2,13,20

LEARNING THROUGH VYAKHYANA-1

(Sutras listed in Table.4a of the syllabus)

No. **Sutra Reference:**

Sutra:
Primary meaning
Vyakhyana
Difference in understanding after Vyakhyana:

PRACTICAL No. 3
OBSERVING THERAPEUTIC UTILITY OF SNEHANA AND SWEDANA

1. **Task-1: Enlist snehayogas available in the hospital pharmacy**

Sl No	Name of Sneha-yoga	Type of Snehadravya used	Reference as per label	Common indications

2. **Task-2: Observe and enlist swedana procedures undertaken by patients in hospital ward**

Patient-1:

Presenting complaints:

Type of sweda applied:

Details of sweda (materials, medicines etc.):

Effects of sweda as observed and described by patient:

Patient-2:

Presenting complaints:

Type of sweda applied:

Details of sweda (materials, medicines etc.)

Effects of sweda observed and described by patient:

Patient-3:

Presenting complaints:

Type of sweda applied:

Details of sweda (materials, medicines etc.)

Effects of sweda observed and described by patient:

Patient-4:

Presenting complaints:

Type of sweda applied:

Details of sweda (materials, medicines etc.)

Effects of sweda observed and described by patient:

Patient-5:

Presenting complaints:

Type of sweda applied:

Details of sweda (materials, medicines etc.)

Effects of sweda observed and described by patient:

PRACTICAL No. 4

IDENTIFICATION OF BAHUDOSHALAKSHANA IN PATIENTS

(Minimum three cases)

No.	**Date:**	**Resident:**	Rural/ Urban
Name:	XYZ	**So. Eco. Status:**	Lower / Middle/ Upper
Address:		**Education:**	I/ P/ S/ HS/ G/ PG
		Occupation:	
Age:		**OPD no.**	
Gender:		**IPD no.**	
Mo. No.		**K/C/O**	

Presenting complaints:

No	QUESTIONNAIRE TO ASSESS BAHUDOṢA LAKṢAṆĀ	Never	Occasionally	Frequently	Always
1.	Do you feel proper hunger thrice a day? (morning, afternoon, night)	1	2	3	4
2.	Do you feel the food you eat lacks in taste?	1	2	3	4
3.	Do you feel any dislikeness towards those things that you like to do?	1	2	3	4
4.	Do you feel tired easily while engaged in any kind of work?	1	2	3	4
5.	Do you experience sadness without any particular reason?	1	2	3	4
6.	Do you feel reluctant to do chores?	1	2	3	4
7.	Do you have boils in your body?	1	2	3	4
8.	Do you experience body odour issues?	1	2	3	4
9.	Do you have raised reddish patches in your skin?	1	2	3	4
10.	Do you feel heaviness in your body?	1	2	3	4
11.	Do you have sleeplessness at night?	1	2	3	4
12.	Do you feel your mouth gets filled with thick saliva?	1	2	3	4
13.	Do you feel itchiness in your body parts?	1	2	3	4
14.	Do you oversleep?	1	2	3	4
15.	Do you experience restlessness?	1	2	3	4

16.	Do you experience weakness while engaged in any kind of work?	1	2	3	4
17.	Do you experience acid reflux?	1	2	3	4
18.	Do you see nightmares that interrupt your sleep?	1	2	3	4
19.	Do you feel any difficulty to understand things in a proper way?	1	2	3	4
20	Do you feel drowsy during day time?	1	2	3	4

Total score:
Interpretation: (Alpadosha - 20 – 40, Madhyamadosha - 41 – 60, Bahudosha – 61 -80)

Result: The given case exhibits Bahudosha/Madhyamadosha/Alpa dosha

Discussion in relation to the treatment given/planned:

PRACTICAL No.5
ASSESSMENT OF DISEASES BASED ON TRIVIDHA BODHYASANGRAHA

(Minimum three cases)

No.	**Date:**	**Resident:**	Rural/ Urban
Name:	XYZ	**So. Eco. Status:**	Lower / Middle/ Upper
Address:		**Education:**	I/ P/ S/ HS/ G/ PG
		Occupation:	
Age:		**OPD no.**	
Gender:		**IPD no.**	
Mo. No.		**K/C/O**	

VIKARAPRAKRUTI

Poorvarupa:

Rupa:

Samprapti:

Upasaya/anupasaya:

ADHISTHANA

Roga-adhisthana (site of disease):

Rogamarga:

Dosha involved:

Dhatu/upadhatu/mala involved:

Srotas involved

Type of srotodushti:

SAMUTHANA (Causative factors)

Ahara:

Vihara:

Agantu:

Manasa:

Interpretation based on treatment adopted:

PRACTICAL No. 6
IDENTIFICTION OF ASHTA DOSHA IN STHOULYA

No.	**Date:**		
Name:	XYZ	**Resident:**	
Address:		**So. Eco. Status:**	
		Education:	
Age:	Preferably > 25	**Occupation:**	
Sex:		**OPD no.**	
Mo. No.		**IPD no.**	
Height:		**K/C/O**	
BMI		**Weight:**	

Symptoms of atisthaulya	**Question to be asked**	**Rating**	**Score (1-10)**
Ayusho hrasa (decrease in quality of life)	How is your total satisfaction in life?	Least satisfied – 0 Most satisfied - 10	
Javoparodha (loss of energy)	How energetic are you during your routine work?	Minimum – 0 Maximum - 10	
Krichravyavayata (decreased libido)	How energetic are during sexual act?	Minimum – 0 Maximum - 10	
Dourbalya (weakness)	How tired are you during routine daily activities?	Always – 0 Never - 10	
Dourgandhya (bad odour)	How much bad body odor troubles you?	Maximum– 0 Minimum - 10	
Swedabadha (excessive sweating)	How much do you sweat during daily activities?	Most – 0 Least - 10	
Kshudatimatram (increased appetite)	How much are you affected by increased appetite?	Most – 0 Least - 10	
Pipasatiyoga (increased thirst)	How much are you affected by increased thirst?	Most – 0 Least - 10	
Total Score:			
Interpretation	Score above 40 – prone to atisthaulya		

Interpretation based on the score:

Discussion:

PRACTICAL No.7
CLINICAL OBSERVATIONS ON NIJA AGANTU RELATIONSHIP

No.	**Date:**	**Resident:**	Rural/ Urban
Name:		**So. Eco. Status:**	Lower / Middle/ Upper
Address:		**Education:**	I/ P/ S/ HS/ G/ PG
		Occupation:	
Age:		**OPD no.**	
Sex:		**IPD no.**	
Mo. No.		**K/C/O**	
Presenting complaints			
History of present illness			
Relevant past history			
Discussion on Nija-Agantu relationship			

Signature of student **Signature of teacher**

PRACTICAL No.8
CLINICAL OBSERVATIONS ON SHADUPAKRAMA

(Minimum three cases)

No.	**Date:**	**Resident:**	Rural/ Urban
Name:		**So. Eco. Status:**	Lower / Middle/ Upper
Address:		**Education:**	I/ P/ S/ HS/ G/ PG
		Occupation:	
Age:		**OPD no.**	
Sex:		**IPD no.**	
Mo. No.		**K/C/O**	
Presenting complaints			
General line of management (as per case sheet)			
Upakramas undertaken by the patient: (select whichever is relevant) Langhana/Brumhana/Swedana/Stambhana/Rukshana/Snehana			
Details of Upakramas performed (medicines, methods and duration)			
Discussion on logic of Upakrama prescribed			

Signature of student **Signature of teacher**

PRACTICAL No.9
ASSESSMENT OF RAKTADUSHTI KARANA IN SPECIFIC CLINICAL CONDITIONS

(Minimum three cases)

No.	**Date:**	**Resident:**	Rural/ Urban
Name:		**So. Eco. Status:**	Lower / Middle/ Upper
Address:		**Education:**	I/ P/ S/ HS/ G/ PG
		Occupation:	
Age:		**OPD no.**	
Sex:		**IPD no.**	
Mo. No.		**K/C/O**	

Presenting complaints	
Raktadushti nidana present (put tick marks for whichever is applicable)	
Ahara (food materials) – regular, excessive intake	
Food materials having teekshna, ushna	
Excessive use of amla, lavana, katu, skhara rasas (use of pickles, papads, chilly items etc.)	
Regular use of kulatha, masha, nishpava, tilataila, pindalu, mulaka etc.	
Regular intake of fish, water birds and animals etc.	
Excessive use of curd, mastu, sukta, sura, sauveeraka etc.	
Intake of viruddha ahara, puti (stale) and putrefied food	
Habit of over eating, adhyasana and ajeerna	
Vihara (lifestyle)	
Habit of day sleep after intake of heavy diet	
Excessive anger	
Excessive exposure to heat and wind	
Inhibition of chardi vega	
Improper/insufficient administration of sodhana in seasons	
Excessive physical exertion, injuries	
Aggravation in autumn season (sarat kala)	

Interpretation:

Signature of student **Signature of teacher**

PRACTICAL No.10
OBSERVATIONS ON USE OF AGRYA AUSHADHA IN CLINICAL PRACTICE

Name of drug:

Category of agrya:

Drug Profile:

Botanical identity:

Rasa Guna Veerya

Vipaka Prabhava:

Parts used:

Therapeutic uses:

Picture of the plant/drug

Important yogas:

Report on interview with Physicians on use of the drug in clinical practice:

Name of the physician: Date of interview:

Information collected:

Student's impressions:

Signature of student **Signature of teacher**

PRACTICAL No.11
ASSESSMENT OF DHATU-UPADHATU-MALA PRADOSHAJAVIKARAS IN PATIENTS
(Minimum five cases)

No.	**Date:**	**Resident:**	Rural/ Urban
Name:		**So. Eco. Status:**	Lower / Middle/ Upper
Address:		**Education**	I/ P/ S/ HS/ G/ PG
		Occupation:	
Age:		**OPD no.**	
Sex:		**IPD no.**	
Mo. No.		**K/C/O**	

Presenting complaints

Assessment of dhatu-upadhatu-indriya pradosha vikaras

Symptoms present	Dhatu/Upadhatu/Mala involved

Interpretation:

Vriddhi of ……

Kshaya of ……

Probable Samprapti involving Dhatu-upadhatu-mala:

Signature of student **Signature of teacher**

PRACTICAL No.14
CASE TAKING IN RELATION TO NIDANAPANCHAKA

(Minimum five cases)

No.	**Date:**	**Resident:**	Rural/ Urban
Name:		**So. Eco. Status:**	Lower / Middle/ Upper
Address:		**Education**	I/ P/ S/ HS/ G/ PG
		Occupation	
Age:		**OPD no.**	
Sex:		**IPD no.**	
Mo. No.		**K/C/O**	
Aetiological factors (Nidana)			
Premonitory symptoms (Pragroopa)			
Presenting complaints (Rupa)			
Pathogenesis (Samprapti)			
Relieving and aggravating factors (Upasaya-anupasaya)			

Signature of student **Signature of teacher**

PRACTICAL No.15

DIFFERENTIAL DIAGNOSIS OF SKIN DISEASES BASED ON GUIDELINES ON KUSHTA

(Minimum three cases)

No.	**Date:**	**Resident:**	Rural/ Urban
Name:		**So. Eco. Status:**	Lower / Middle/ Upper
Address:		**Education:**	I/ P/ S/ HS/ G/ PG
		Occupation:	
Age:		**OPD no.**	
Sex:		**IPD no.**	
Mo. No.		**K/C/O**	
Presenting complaints			

Feature	**Presentation** (use appropriate terms as per descriptions in Kushtanidana)	**Dosha predominance**	**Probable diagnosis (type of kushta)**
Varna (Color)			
Akriti (appearance)			
Srava (secretions)			
Sparsa (touch)			
Other associated symptoms (daha, kandu, sula etc.)			

Signature of student **Signature of teacher**

PRACTICAL No.16

PRAMANA PARIKSHA

(Minimum three cases)

No.	**Date:**	**Resident:**	Rural/ Urban
Name:		**So. Eco. Status:**	Lower / Middle/ Upper
Address:		**Education:**	I/ P/ S/ HS/ G/ PG
		Occupation:	
Age:		**OPD no.**	
Sex:		**IPD no.**	
Mo. No.		**K/C/O**	
Status of health			

Measurements taken	**Ratios**	**Interpretation**

Signature of the student: **Signature of teacher:**

PRACTICAL No. 17
IDENTIFICATION OF VIKARAVIGHATA BHAVA ABHAVA IN PATIENTS

Disease assigned:

Summary of group discussion:

Check list prepared after group discussions:

Factors identified as risk factors/ aggravating factors (vikara-vighata-abhava)	**Factors identified as protective factors, factors against diseases (vikara-vighata-bhava)**

Screening patients with the checklist: ((Minimum three cases)

No.	**Date:**	**Resident:**	Rural/ Urban
Name:		**So. Eco. Status:**	Lower / Middle/ Upper
Address:		**Education:**	I/ P/ S/ HS/ G/ PG
		Occupation:	
Age:		**OPD no.**	
Sex:		**IPD no.**	
Mo. No.		**K/C/O**	
Risk factors present as per check list		**Protective factors present as per checklist**	

Interpretation:

Signature of student **Signature of teacher**

PRACTICAL No. 18
EXPLORATION OF LOKAPURUSHA SAMYA VADA IN THE BACK GROUND OF ONE HEALTH

Date of discussion: Topic:
Moderator:

Group Members:

Major theme discussed:

Summary of discussion:

Important ideas evolved:

Signature of student **Signature of teacher**

PRACTICAL No.21
LEARNING THROUGH SAMBHASHA PARISHAD

Group No. **Topic assigned:**
Date of the parishat:

Methods/components of Vadamarga used in the parishat:

Details of conduct of the parishat:

Structured summary of the parishat:

Pratijna:

Hetu:

Udaharana:

Upanaya:

Nigamana:

Assessment by Faculty:

Signature of student **Signature of teacher**

PRACTICAL No.22

SROTAS PROFORMA

(Minimum three cases)

No.	**Date:**	**Resident:**	Rural/ Urban
Name:		**So. Eco. Status:**	Lower / Middle/ Upper
Address:		**Education:**	I/ P/ S/ HS/ G/ PG
		Occupation:	
Age:		**OPD no.**	
Sex:		**IPD no.**	
Mo. No.		**K/C/O**	
Presenting complaints			

Srotas involved	Whether causative factors of the particular srotodushti is present or not, If yes, give the details	Type of srotodushti (Atipravritti/sanga/siragranthi/vimargagamana	**Interpretation:**

Signature of student **Signature of teacher**

PRACTICAL No.23

LEARNING THROUGH TANTRAYUKTI

(Minimum 15 different tantrayuktis selected from the list given in Table.4a of the syllabus)

No. **Sutra Reference:**

Sutra:
Interpretation with tantrayukti:
New understanding by applying tantrayukti

PRACTICAL No.24

ASSESSMENT OF HEALTH THROUGH DHATUSAMYA PAREEKSHA

No.	**Date:**	**Resident:**	Rural/ Urban
Name:		**So. Eco. Status:**	Lower / Middle/ Upper
Address:		**Education:**	I/ P/ S/ HS/ G/ PG
		Occupation:	
Age:		**Sex:**	

Question	**Response**
Are you usually free from health issues?	Yes/No
Do you have proper voice?	Yes/No
Do you have normal skin complexion/color/pigmentation?	Yes/No
Is your weight/BMI normal as per the age and gender?	Yes/No
Do you have proper physical strength ?	Yes/No
Do you have appetite at proper intervals?	Yes/No
Do you feel taste of the food you eat?	Yes/No
Does the food get digested within a proper time?	Yes/ No
Do you get sleep at proper time?	Yes/No
Is your sleep sound?	Yes/No
Do you get up fresh in the morning?	Yes/No
Is you sleep free from nightmares ?	Yes/No
Do you get proper stool evacuation daily?	Yes/No
Do you pass urine normally?	Yes/No
Do you have normal vision?	Yes/No
Do you have proper hearing capacity?	Yes/No
Do you receive smell normally?	Yes/No
Do you know taste properly?	Yes/No
Can you identify touch properly through skin?	Yes/No
Does your mind work properly?	Yes/No
Are you satisfied with your life?	Yes/No

(Interpretation: Scoring - Yes +1, No -1; Total score 15-20 – Very good in health, 10-15 – moderately healthy, below 10 – unhealthy)
Score obtained:
Status of health:

Signature of student **Signature of teacher**

PRACTICAL No. 25

AGNI ASSESSMENT BASED ON TOLERANCE TO APACHARA

No.	**Date:**	**Resident:**	Rural/ Urban
Name:		**So. Eco. Status:**	Lower / Middle/ Upper
Address :		**Education:**	I/ P/ S/ HS/ G/ PG
		Occupation:	
Age:		**Gender**	
Assessment Questionnaire			
1	Capability to tolerate irregularities in diet	Always capable to tolerate any type of abnormality/irregularity in food intake	Teekshnagni
		Digestion gets affected by considerable abnormality/irregularity in food intake	Samagni
		Fluctuating nature in tolerating abnormality/irregularity	Vishamagni
		Not capable to tolerate even minimum abnormality/irregularity	Mandagni
2	Type of Agni as assessed by standard tool*		

* (Singh, Aparna & Singh, Girish & Patwardhan, Kishor & Gehlot, Sangeeta. (2016). Development, Validation, and Verification of a Self-Assessment Tool to Estimate Agnibala (Digestive Strength). Journal of Evidence-Based Complementary and Alternative Medicine. 22. 10.1177/2156587216656117.)

Interpretation:

How much the observations conform together?

Signature of student **Signature of teacher**

PRACTICAL No.26
TRIVIDHA ROGAVISHESHAVIJNANA IN DIAGNOSIS

(Minimum three cases)

No.	**Date:**	**Resident:**	Rural/ Urban
Name:		**So. Eco. Status:**	Lower / Middle/ Upper
Address :		**Education:**	I/ P/ S/ HS/ G/ PG
		Occupation:	
Age:		**Gender**	

Presenting complaints:	
Application of pratyaksha - Observations through different sense organs and other instruments	
Application of anumana	
Observed facts	**Inferred facts**
Application of aptopadesa – Write the references/quotes/verses from Samhitas, textbooks or articles to justify/explain the conclusions	

Signature of student **Signature of teacher**

PRACTICAL No. 27
ASSESSMENT OF UPASAYA AND ANUPASAYA IN PATIENTS

(Minimum three cases)

No.	**Date:**	**Resident:**	Rural/ Urban
Name:		**So. Eco. Status:**	Lower / Middle/ Upper
Address :		**Education:**	I/ P/ S/ HS/ G/ PG
		Occupation:	
Age:		**Gender**	
Desa	Jangal/Sadharana/Anoopa		
Presenting complaints:			
Probable Diagnosis			
Doshadushti: Doshaguna Dushti : Dhatudushti : Maladushti : Probable Disease Diagnosis if available:			

Upashaya- Anupashaya Pareeksha

Upashaya		**Ahara**	**Aushadha**	**Vihar/Kriya**	**Kala**
	Dravya	1) 2) 3)	1) 2) 3)	1) 2) 3) 4)	Ushna/Sheeta/Varsha/Durdina
	Guna				
	Karma				
Anupashaya		**Ahara**	**Aushadha**	**Vihara/Kriya**	**Kala**
	Dravya	1) 2) 3)	1) 2) 3)	1) 2) 3) 4)	
	Guna				
	Karma				

Interpretation:

Disease diagnosis confirmation based on Upashaya- anupashaya –

Probable line of Management based on Upashaya- anupashaya --

Signature of student **Signature of teacher**

Course curriculum for Second Professional BAMS

(PRESCRIBED BY NCISM)



Swasthavritta evam Yoga

(SUBJECT CODE : AyUG-SW)

(Applicable from 2021-22 batch, from the academic year 2023-24 onwards for 5 years or until further notification by NCISM, whichever is earlier)

ncism

।। आयुषे सर्वलोकानाम् ।।

SCAN ME

SW

BOARD OF AYURVEDA
NATIONAL COMMISSION FOR INDIAN SYSTEM OF MEDICINE
NEW DELHI-110058

भारतीय चिकित्सा पद्धति राष्ट्रीय आयोग
आयुष मंत्रालय, भारत सरकार
कार्यालय: टी–19, पहली और दूसरी मंजिल, ब्लॉक–IV, धन्वन्तरि भवन,
मार्ग नंबर– 66, पंजाबी बाग (पश्चिम), नई दिल्ली–110026
National Commission for Indian System of Medicine
Ministry of AYUSH, Govt. of India
Office: T-19, 1st & 2nd Floor, Block-IV, Dhanwantari Bhawan,
Road No.- 66, Punjabi Bagh (West), New Delhi-110026
ncism
॥ आयुषे सर्वलोकानाम् ॥
देश का प्रकृति परीक्षण अभियान
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क्रमांक/ Ref. No BOA/Syllabus/31/2/2024 **दिनांक/Dated. 01.01.2025**

To,

The Registrars of the universities having Ayurveda colleges
Directors/ Deans/Principals of all Ayurveda colleges

Subject: - Information about Changes/Corrections in the 2nd Professional Syllabus of – Rognidana Vikruti vigyan, Swasthvritta & Yoga, and Dravyaguna Subjects- reg.

Dear Sir/Madam,

With reference to the subject mentioned above, you are hereby informed to implement the corrections in the below mentioned curriculum for the Second Professional BAMS subjects:

- **Roga Nidan evam Vikriti Vigyan**
- **Swasthavritta evam Yoga**
- **Dravyaguna Vigyan**

Kindly circulate the same to the concerned for implementation.

Enclosure: - As above

Dr. B.S Prasad
President, BOA, NCISM

डॉ. श्रीनिवास प्रसाद बूदुरु
अध्यक्ष, आयुर्वेद बोर्ड
President, Board of Ayurveda
भारतीय चिकित्सा पद्धति राष्ट्रीय आयोग
National Commission for Indian System of Medicine
पंजाबी बाग (पश्चिम), नई दिल्ली-110026
Punjabi Bagh (West), New Delhi-110026

Copy to: -

1. Chairperson, National Commission for Indian System of Medicine, New Delhi-110026.
2. Guard file.

Dr. B.S Prasad
President, BOA, NCISM

Corrigendum

COURSE CURRICULUM FOR SECOND PROFESSIONAL BAMS

(PRESCRIBED BY NCISM)

Swasthavritta evam Yoga

(SUBJECT CODE: AyUG - SW)

Corrections for implementation:

Apply the corrections as detailed below					
Page no.	**Table no.**	**Point no.**	**Column**	**Existing Text**	**Corrected Text**
54	6F	11	C Marks	10	15
54	6F	12-13		16	17
55	6F	14-16		20	18
55	6F	17-20		20	22
55	6F	21-23		19	14
55	6F	24-25		15	14

- **Replace table 6 G with the below mentioned table-**

Corrected Table- 6G (Blue Print of Paper I & II)

Type of Question	Sr. No.	Syllabus point as per Table- 6F	Title of the Topic
Paper 1			
Multiple choice Questions 20 Questions 1 Mark each All compulsory	1.	1.	Swastha and Swasthya
	2.	2.	Healthy Life style – Dinacharya
	3.	3.	Ratricharya
	4.	4.	Ritucharya
	5.	5.	Roganutpadaniya
	6.	6.	Sadvritta
	7.	7.	Ahara
	8.	8.	Yoga
	9.	10.	Naturopathy
	10.	2.	Healthy Life style -Dinacharya
	11.	3.	Ratricharya
	12.	4.	Ritucharya
	13.	6.	Sadvritta
	14.	7.	Ahara
	15.		
	16.		
	17.		
	18.	2.	Healthy Life style -Dinacharya
	19.	4.	Ritucharya
	20.	9 .	Yoga
	1.	1.	Swastha and Swasthya
	2.	2.	Healthy Life style -Dinacharya
	3.	3.	Ratricharya
	4.	5.	Roganutpadaniya

Corrigendum

SAQ - Short Answers Questions: Eight Questions 5 Marks Each All Compulsory	5.	6.	Sadvritta
	6.	8.	Rasayana for swastha
	7.	7.	Ahara
	8.	10.	Naturopathy
Long Answer Questions Four Question 10 marks each All compulsory	1.	1.	Healthy Life style- Dincharya (Daily regimen)
	2.	2.	Ritucharya
	3.	3.	Ahara
	4.	4.	Yoga
Paper 2			
Multiple Choice Questions 1 mark each All compulsory	1.	11.	Janapadodhwamsa / Maraka Vyadhi
	2.	12.	Environmental health
	3.	13.	Disaster management
	4.	14.	Occupational Health
	5.	15.	School health services
	6.	16.	Disinfection
	7.	1.	Janapadodhwamsa / Maraka Vyadhi
	8.	18.	Mother and Child health care
	9.	11.	Janapadodhwamsa / Maraka Vyadhi
	10.	18.	Mother and child health care
	11.	21.	World Health Organization and International Health Agencies
	12.	22.	Vital Statistics
	13.	23.	Health Administration
	14.	25.	National Health Policy
	15.	24.	National Health Programmes
	16.	11.	Janapadodhwamsa / Maraka Vyadhi
	17.	22.	Vital statistics
	18.	25.	National health policy
	19.	24.	National Health Programmes
	20.	11.	Janapadodhwamsa / Maraka Vyadhi
Short Question Eight Questions – 5 marks Each All Compulsory	1.	13.	Disaster management
	2.	14.	Occupational Health
	3.	15.	School health services
	4.	16.	Disinfection
	5.	21.	World Health Organization and International Health Agencies
	6.	19.	Family welfare programme
	7.	20.	Preventive Geriatrics
	8.	23.	Health Administration
Long Answer Questions Four Question 10 marks each All compulsory	1.	1.	Janpadodhwamsa / Maraka Vyadhi
	2.	2.	Enviornmental health
	3.	3.	Primary health care
	4.	4.	National Health Programmes

Corrigendum

NCISM

II Professional Ayurvedacharya (BAMS)

Subject Code : AyUG-SW

Summary

Total number of Teaching hours: 400			
Lecture hours(LH)-Theory		150	150(LH)
Paper I	75		
Paper II	75		
Non Lecture hours(NLH)-Theory		250	250(NLH)
Paper I & II	75		
Non Lecture hours(NLH)-Practical			
Paper I & II	175		

Examination (Papers & Mark Distribution)					
Item	**Theory Component Marks**	**Practical Component Marks**			
		Practical	**Viva**	**Elective**	**IA**
Paper I	100	100	60	(Set SC) 10	30
Paper II	100				
Sub-Total	200	200			
Total marks	400				

Important Note:-The User Manual II BAMS is a valuable resource that provides comprehensive details about the curriculum file. It will help you understand and implement the curriculum. Please read the User Manual II before reading this curriculum file. The curriculum file has been thoroughly reviewed and verified for accuracy. However, if you find any discrepancies, please note that the contents related to the MSE should be considered authentic.
In case of difficulty and questions regarding curriculum write to cur.imp@ncismindia.org

PREFACE

Health care, especially the preventive health care is coming to a fore front, most so during recent years due to pandemic situation. In fact, the preventive health care is indeed the strength of Ayurveda as its primary motto itself is 'Swasthasya swasthya rakshanam', Keep sustaining health of a healthy and nourishes it. The students of Ayurveda need to understand it better, who can carry this message and contribute for building a healthy India, may the entire world. Keeping this in mind any effort to sensitize the student community to understand the basics of Swasthavritta, the preventive health care of Ayurveda is laudable. Swasthavritta is an important subject of the BAMS program for the undergraduate students of Ayurveda.The term Swastha means healthy individual and Vritta means actions or regimen thus Swasthavritta denotes the actions or regimen which can be observed to maintain the health of a healthy individual and to prevent the diseases.This subject refers to the Preventive medicine and social medicine/ Community medicine of contemporary medical science.

Swasthavritta deals with the Vaiyaktika swasthavritta (Individualized lifestyle including in terms of prevention, promotion & maintainance of health) incudes Dinacharya, Ritucharya, Sadvritta, Rasayana , Pathya-Apathya for both Swastha as well as disease condition. Samajika swasthavritta- Community health deals with Janapadodhwamsa, Environmental health, Occupational health, School health and National health programs etc, along with these topics Swasthavritta also deals Yoga and Naturopathy. Thus, Swasthavritta provides holistic health care to community.

New curriculum of Swasthavritta is designed considering cognitive, affective, and psychomotor domains. There are group discussions, workshops, field visits, health institutional visits, factory visits health surveys and activities beyond the textbook during the practical hours like preparation of charts, models, seminar presentations by students. Swasthavritta subject also deals with teaching learning methods like role play, flipped the classroom, etc. Some assessment methods like OSPE, PBL, DOPS, CBD, skill assessment, etc are incorporated.

This curriculum serves as a valuable resource for both educators and students, guiding them through the fascinating realm of swasthavritta. May the knwoledge gained from this curriculum empower students to make a positive impact in promoting health, preventing diseases and creating a healthier society. This curriculum epmowers the Ayrervedic graduates who capable of designing customized individualized lifestyle as well as community health measures as per Ayurvedic principles. This also makes graduates to become health educators, who will take part in national health programs, who can assess community needs and develop measures to counteract the health problems and make them to prepare competent community physicians.

INDEX

Course Code and Name of Course 5
Table 1- Course learning outcomes and matched PO 5
Table 2 : Contents of Course 6
Paper 1 6
Paper 2 10
Table 3: Learning objectives (Theory) of Course 14
Paper 1 14
Paper 2 27
List of Practicals 37
Table 4: Learning objectives (Practical) 38
Practical 1 38
Table 4a: List of Practical 45
Activity 48
Table 5- Teaching learning method 50
Table 6: Assessment Summary: Assessment is subdivided in A to H points 51
6 A-Number of Papers and Marks Distribution 51
6 B - Scheme of Assessment (formative and Summative) 51
6 C - Calculation Method for Internal assessment Marks 52
6 D - Evaluation Methods for Periodical Assessment 52
6 E Question Paper Pattern 53
6 F Distribution of theory examination 54
Paper 1 54
Paper 2 54
6 G Blue print of paper I & II 56
6 H Distribution of Practical Exam 59
References Books/ Resources 62
Abbreviations 65

Course Code and Name of Course

Course code	Name of Course
AyUG-SW	Swasthavritta evam Yoga

Table 1- Course learning outcomes and matched PO

SR1 CO No	A1 Course learning Outcomes (CO) AyUG-SW At the end of the course AyUG-SW, the students should be able to-	B1 Course learning Outcomes matched with program learning outcomes.
CO1	Demonstrate application of principles of Swasthavritta in lifestyle modifications.	PO1,PO2,PO4,PO6
CO2	Assess the health status and advise preventive & promotive measures according to Ayurveda principles	PO3
CO3	Demonstrate and advise Yoga and Naturopathy as health promotive and disease preventive regimen	PO1,PO4
CO4	Understand and apply the principles and components of primary health care and health policies to achieve the goal of health for all	PO2,PO5
CO5	Advocate and propagate preventive principles of Ayurveda and contemporary sciences through Information, Education and Communication(IEC)	PO8
CO6	Conduct community surveys and apply epidemiological principles for the assessment of health & morbidity as a community physician	PO2,PO5
CO7	Understand and apply the principles of environmental health and its effects on public health with control measures	PO3,PO4
CO8	Demonstrate skills and research aptitude for the promotion of health and prevention of diseases	PO9

Table 2 : Contents of Course

Paper 1 Principles of Swasthavritta, Yoga and Naturopathy					
Sr. No	**A2 List of Topics**	**B2 Term**	**C2 Marks**	**D2 Lecture hours**	**E2 Non-Lecture hours**
1	**Swastha and Swasthya** Definition of Swasthavritta and its objective. Swasthalakshanas, Arogyalakshanas, Dhatusamyalakshanas. Concept of Health & Operational definition of health. Importance of Shodhana in Swastha in relation to Sanchita & Asanchitha Dosha & Classification of Swastha purusha as Sanchita dosha and Asanchita Dosha.Dimensions of health -Physical, Mental and Social. Concept of well-being : objective component of well-being - standard of living and level of living and subjective component of well-being - Quality of Life**.** One health concept / Vasudhaiva Kutumbakam" or "One Earth · One Family- One Future".	1	6	3	0
2	**Healthy Life style -Dinacharya (Daily regimen)** Concept of Primordial, Primary, Secondary and Tertiary Prevention along with examples in Ayurveda. Importance of Ahara and Vihara as the health promotive and disease preventive measures. Importance of **Niyata kala vihara (**Dinacharya, Ritucharya) and **Aniyata kalaVihara**(Vegadharana, Vegaudirana, Ritushodhana, Brumhana and Bhutadi asparshana) for health promotion and disease prevention. Concept of waking up at 'Brahme muhurta'in the present scenario and the effect of early rise on health, sleep, alertness and memory. UshaJalapana' (Drinking water in early morning). Importance of Malatyaga in vata kaala - early morning (Good Bowel Habits.). Mukhaprakshalana and face washes used currently. Concept of Dantadhavana and modern-day brushing techniques and dentifrices. Concept of Jihwanirlekhana and the tools used in today's era and their benefits. Concept of Anjana as a health promotive measure. Kavala and gandusha for oral hygiene including mouthwashes available in the market. Abhyanga as as health promotive measure. Importance of the Tambula. Prayogika Dhoomapana (Practicable & non-practicable Dhoomapana- inhalation of herbal fumes/ herbal inhalers with their benefits and contraindications. Ill effects of tobacco smoking of various sorts viz. beedi, cigarette, hookah on health. Applied aspects of Sarvanga Abhyanga, Padabhyanga, Shiroabhyanga and their possible physiological effects. Application of Abhyanga according to different age groups and occupation/activity. Different snehas/oils to be used for daily abhyanga as per seasons and geographical variations. Concept of Vyayama and present-	1	38	8	5

	day practices such as aerobic exercises, muscle strengthening exercises etc.to be practiced as per prakriti, age and occupation. Ardhashakti lakshanas of vyayama and the consequences of ati vyayama. Udwartana, Utsadana Udgharshana . Snana- Types of different types of bath and Physiological effects of snana on body and mind. Importance and benefits of Anulepana. Merits and demerits of present-day applications like face powder, face pack, balm, lotions, lipsticks, deodorants and perfumes etc. Importance of proper clothing (Vastradharana) in social life.				
3	**Ratricharya** Ratri bhojanvidhi and its relation to health. Ratri shayana vidhi in relation to the proper time of sleep. Relation between Nidra and health. Effects of Yukta & Ayukta nidra. Effects of Ratri Jagarana, Diwaswapna, Anidra, Atinidra and Akala Nidra. Ahara and Vihara Causing sound sleep as well as disturbed sleep. Formulation of the duration of sleep according to age and Sleep in healthy and ailing persons.Various Aspects of Sleep like: a. Daytime Sleepiness and Alertness b. Sleep Deprivation c. Sleep and Host Defense d. Master Circadian Clock and Master Circadian Rhythm e. Human Circadian Timing System and Sleep-Wake Regulation f. Circadian Rhythms in Sleepiness, Alertness, and Performance g. Circadian Disorders of the Sleep-Wake Cycle. Sleep apnea , insomnia, narcolepsy and restless leg syndrome. Solutions to Asatmya jagarana (sleep disorders). Importance of observing brahmacharya and abrahmacharya in ratricharya in relation to health. Brahmacharya with special reference to lifestyle guidelines. Reproductive and sexual health according Ayurveda.	1		6	1
4	**Ritucharya** Classification of kaala , Adana kala and visarga kala , identification of seasons based on the ritu lakshanas in different geographical areas. Sanchaya- Prakopa-Prashamana of Dosha with their gunas in each ritu. Relation of Agni , Bala and Ritu with its application. Ritu shodhana for the prevention of diseases. Pathya - Apathya in regards to Ahara -Vihara in all six ritus in present scenario. Importance of ahara and vihara in ritu sandhi and Yamadanshtra kala. Rituharitaki as a rasayana with research updates. Effects of Rituviparyaya on health and its relation to janapadaudhwamsa/maraka vyadhis with present day examples.	1		5	2
5	**Roganutpadaniya** Concept of vegadharana and vega-udirana in relation to health and morbidity.Symptoms and management principles of adharaniya vega janya vyadhis from	1	13	2	1

	bruhattrayee.Concept of vegaudirana (viz. Use of snuffing powder, forcible evacuation of bowels & bladder etc.). Importance of dharaniya vegas in promotion of mental health.				
6	**Sadvritta** Sadavritta measures for the maintenance of personal ,social and spiritual health. Observance of Sadvritta for the prevention of Adharma. Achara Rasayana" and its role in the prevention and control of diseases.Characteristics of a mentally healthy person, warning signals of poor mental health, types of mental illness and causes of mental ill-health. Mental health services and comprehensive mental health programme. Role of trigunas and satvavajaya in mental health promotion in present era. Digital health promotion	1		2	1
7	**Ahara** Significance of Ahara for health and well-being according to Ayurveda & Contemporary science. Classification of aharadravyas as per Ayurveda & Contemporary science. Ahara vidhividhana, Ahara sevanakala & Dwadasha ashanapravicharana . Applied aspect of Pathyahara, Apathyahara, Samashana, Adhyashana, Vishamashana. Ahara &vihara leading to Santarpanajanya evam Apatarpanajanyavyadhi and importance of upavasa and concept of intermittent fasting. Benefits of Shadrasabhojana. Importance of Ashta aharavidhivisesha ayatanani in present era. Importance of Nityasevaniyadravyas in the maintenance of health. Properties (Guna& karmas) of Ahara dravyas in the following vargas with their nutritive value: Dhanyavarga – Shuka Dhanya (Cereals and Millets), Shami Dhanya (Pulses), Shaka and Haritavarga (Leafy and Non leafy vegatables), Kanda varga (roots and tubers), Phalavarga (Fruits), Taila varga (Fats and Oils), Ikshuvarga (Sugarcane Products) &Madyavarga(Alcoholic Beverages), Dugdhavarga (Milk and Milk products), Ahara UpayogiVarga (Spices & Condiments), Kritannavarga(Prepared Food), Mamsavarga (Meat types) and JalaVarga.Definition of Pro-biotics and Pre-biotics and their utility. Proximate principles of Food - Recommended Daily Allowance according to various conditions, Sources and deficiency diseases of Protein, Carbohydrate, Fats, Vitamins, and Minerals. Definition of Balanced diet and diet for an individual depending on age, body weight and physiological status and Social Aspects of Nutrition.Food hygiene, Sanitation of eating places, Preservation of food, Food handlers, Foodborne diseases, Food fortification, Food adulteration and Food toxicants. Milk Hygiene, Milk composition, Source of infection for Milk, Milk borne	1	20	20	15

	diseases, Clean and Safe milk and Pasteurization of milk Meat Hygiene, Meat inspection, Slaughterhouse and Freshness of fish and egg. Safety and hygiene measures for Fruits and Vegetables.Formulation of Pathya-Apathya diet for prevention of lifestyle disorders such as Obesity, Diabetes mellitus,Cardiovascular diseases and Acid peptic diseases.Description of Food safety and standards regulation(Ayurveda Ahara Regulations), 2022 and Food safety and standards Act, 2006. Different Dietary Supplements and Ergogenic Aids.Impact of different dietary patterns: Mediterranean diet, Keto Diet, DASH diet, the MIND diet, Vegan diet, Ovo-lacto-vegetarian, Pesco-vegetarian, Plant-based diet, Intermittent diet, the Nordic diet, importance of organic foods, merits and demerits of genetically modified foods and inflammatory foods such as fried foods, cookies, hot dogs, red meat, refined grains, pizza, burger etc,. and instant foods like Maggi etc,. Concept of slow and fast foods and impact of cooking processes like boiling, steaming, sautéing, fermenting etc. (samskara) on health. Definition of Nutraceuticals, Nutrigenomics, Nutrigenetics. Concept of Viruddhaahara with classical and modern-day examples and the application of this in the prevention of diseases				
8	**Rasayana for Swastha** Definition of Rasayana and benefits of Rasayana. Classification and types of Rasayana with examples. Urjaskara Rasayanas as per age and occupations /Activities .Antioxidant & immunomodulatory effects of Rasayana with reference to research articles. Importance of lifestyle counselling with its methods.	1	5	2	2
9	**Yoga** Etymology/derivation of the word 'Yoga'. Definitions of Yoga according to PatanjaliYogasutras, Bhagavad Gita and Charaka Samhita. Difference between Rajayoga, Hathayoga and Karmayoga.Yogabhyasa Pratibhandhakas and Yoga Siddhikarabhavas. Mitahara and Pathya-apathyas during Yogabhyasa . Concept of Panchakosha theory. Description of Ashtangas of Yoga - Yama , Niyama , Asana .Pranayama , Pratyahara, Dharana, Dhyana and Samadhi. Suryanamaskara . Description of Shatkarmas - Dhauti, Basti, Neti, Trataka, Nauli, and Kapalabhati.Bandha - procedure and benefits of Mulabandha, Jalandharabandha and Uddiyanabandha. Mudras - Shanmukhi mudra and Jnana mudra. Shatchakras and their importance in Yoga practice. Description of Ida-Pingala-Sushumna nadis and their importance in yoga practice.Concept of Moksha according to Charaka , Muktatmalakshana and Moksha upayas.Importance of International Day of Yoga (IDY).	2	18	22	6

	Adverse effects of improper Yoga practices				
10	**Naturopathy** Basic principles of Naturopathy. Concept of Panchabhutopasana.Therapeutic effects of Mud therapy. Therapeutic effects of Sun bath. Fasting therapy - its types and benefits. Hydrotherapy - types of water used based on the temperature and therapeutic effects of Hydrotherapy. Therapeutic effects of Massage	2		5	4
Total Marks			**100**	**75 hr**	**37 hr**

Paper 2 Public health					
Sr. No	**A2 List of Topics**	**B2 Term**	**C2 Marks**	**D2 Lecture hours**	**E2 Non-Lecture hours**
11	**Janapadodhwamsa / Maraka Vyadhi** Causes of Janapadodhwamsa/ maraka vyadhi. Manifestation and control measures of Janapadodhwamsa.Principles and uses of epidemiology. Dynamics of disease transmission.Theory of disease causation - epidemiological triad and natural history of disease.Concept of prevention, modes of intervention, risk factors, incidence and prevalence.Susceptible host and host defense. Immunizing Agents. Concept of vyadhikshamatwa.Investigation of an epidemic. Prevention and control of an epidemic. Sankramaka roga as per Ayurveda.Epidemiological determinants, brief pathology ,transmission, incubation period , clinical features, diagnosis and preventive measures of 1. Droplet Infections such as Chicken Pox, Measles, Rubella, Diphtheria, Pertussis, Mumps, Tuberculosis, SARS, Influenza, Pneumonia, Covid-19 and Leprosy. 2. Water borne Infections / intestinal infections - Cholera, Polio, Viral Hepatitis, Typhoid. 3. Intestinal infestations – Ascariasis, Hook worm and Tape worm. 4.Emerging and re-emerging diseases. Explain Role of Ayurveda in Epidemics like COVID-19, Zika Virus , H1N1,H3N2,etc,. 5.Sexually transmitted diseases (STDs) with prevention and control - HIV/ AIDS, Syphilis and Gonorrhea. Role of Ayurveda in the prevention and control with recent research updates of Lifestyle diseases such as DM, Obesity, Coronary artery disease (CAD) and Cancer. Epidemic Diseases (Amendment) Ordinance Act,2020 .,	2	10	37	10
12	**Environmental health** **Air:** Properties of Vayu and composition of air. Changes in	2	16	10	5

	air of the occupied room. Comfort zone and indices of thermal comfort. Air pollution -causes, prevention and control. Effects of air pollution on health and social aspects .Effects of Global warming with recent updates. Definition of ventilation and types of Ventilation. Effects of high altitude and mountain air on health.**Water :** Safe and wholesome water and water requirements. Properties of water from different sources. Water pollution and health hazards. Contemporary and Ayurvedic methods of water purification. Hard Water - its effects on health and methods of removal of hardness. Quality of water stored in different vessels as per classics. Rain water harvesting - methods and its importance.**Soil :** Types of soil and relation between soil and health. Land pollution - its prevention and control. Land purification as per the classics. Social goals of Housing and Housing standards. The Building and other construction workers (Regulation of employment and conditions of services) Act, 1996 Effects of housing on health. Overcrowding and its impact on health. **Light:** Good lighting, natural lighting and artificial lighting. Biological effects of lighting.**Noise :** Definition of noise and its sources, effects on health and control measures. **Radiation:** Radiation - sources and effects on health and control measures.**Waste disposal :** Types of solid waste, Storage and collection of refuse. Methods of disposal of solid waste (Rural & urban). Excreta Disposal methods & Sanitary Latrines. Modern Sewage disposal methods. Disposal methods of Excreta during camps, fairs, and festivals. Bio-medical waste management and Bio-medical waste management rules, 2016. Environment protection Act,1986.				
13	**Disaster management** Definition of disaster and disaster management. Effects of natural and man-made disasters.Epidemiologic surveillance and disease control measures.	2		1	2
14	**Occupational Health** Definition of occupational health and Ergonomics. Occupational Hazards and Occupational diseases. Prevention and control of Occupational diseases . ESI Act ,1948 and The factories Act.1948. Role of Ayurveda in various Occupational health problems. The Merchant Shipping / Medical Examination Rules,2000	2	20	3	3
15	**School health services** Health problems of school children. Aspects of school health services.Duties of school medical officers. Healthy environment in the school.	2		2	3
16	**Disinfection**	2		2	3

	Definition of different term used in relation to disinfection. Types of disinfection. Natural agents, Physical agents and Chemical agents of disinfection. Recommended disinfection procedures of feces & urine, sputum, and room. Ayurvedic disinfection methods.				
17	**Primary health care** Definition of Primary Health Care. Principles and elements of primary health care. Levels of health care. Structure of Primary health care at village, sub-center, Primary health center (PHC), Community health center (CHC) and Rural hospital levels. Primary health care in Health insurance, Private agencies, Voluntary health agencies, NGOs and the AYUSH sector. Role of Ayurveda in Primary Health Care.	2	20	2	1
18	**Mother and Child health care** Objectives of Maternal and Child Care services. MCH problems & indicators of MCH care.	2		1	1
19	**Family welfare programme** Definition of Demography and sources of demographic statistics in India. Demographic cycle & definition of life expectancy.Definition of family planning, eligible couple and target couple. Objectives of family planning. Problems of population explosion . National population policy.Methods of Contraceptive (Fertility Regulating Methods).	2		2	2
20	**Preventive Geriatrics** Health problems of the aged and prevention and control measures. Relation between lifestyle and healthy aging. Role of Rasayana in preventive geriatrics.	2		1	1
21	**World Health Organization and International health agencies** Definition of World Health organization. Structure, regions, and works of the World Health Organization. Functions of various international health agencies - United Nations health agencies, Bilateral health agencies and Non- Governmental agencies. Contribution of the World health organization to the global acceptance of Ayurveda.	2	19	3	1
22	**Vital Statistics** Definition of Vital Statistics. Sources of Vital statistics. Fertility , Morbidity and Mortality rates. Registration of Birth and Death Act, 1969	2		1	1
23	**Health Administration** Health administration including AYUSH at the Central, State, District, and Village levels.	2		2	1
24	**National Health Programmes**	2	15	7	3

	National Health Programs : Leprosy(NLEP), AIDS (NACP), Blindness (NPCB), Polio , National TB Elimination program , Vector born disease control program, RCH program, ICDS program, Universal Immunization program, National mental health program , National Program for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases & Stroke (NPCDCS) , Swachha Bharat mission, Ayushman Bharat Yojana, Ayushman Bharat Digital Mission, National health mission (NRHM&NUHM), National AYUSH Mission (NAM).National nutrition programs: National Iodine Deficiency Disorders Control program, National Iron Plus Initiative for Anemia Control, National Vitamin A prophylaxis program, Mid-Day Meal program & Balwadi nutrition program.				
25	**National Health Policy** National Health Policy (NHP) and the scope of Ayurveda in NHP.	2		1	1
Total Marks			**100**	**75 hr**	**38 hr**

Table 3: Learning objectives (Theory) of Course

Paper 1 Principles of Swasthavritta, Yoga and Naturopathy									
A3 Course outcome	**B3** Learning Objective (At the end of the session, the students should be able to)	**C3** Domain/sub	**D3** Must to know / desirable to know / Nice to know	**E3** Level Does/ Shows how/ Knows how/ Know	**F3** T-L method	**G3** Assessment (Refer abbreviations)	**H3** Formative/ summative	**I3** Term	**J3** Integration
Topic 1 Swastha and Swasthya (Lecture :3 hours, Non lecture: 0 hours)									
CO1	Define Swasthavritta and describe its objective.	CK	MK	K	L	TT-Theory	S	I	
CO1	Describe and compare Swasthalakshanas Arogyalakshanas,Dhatusamyalakshanas. Describe Concept of Health & Operational definition of health.	CC	MK	K	L&PPT	TT-Theory	S	I	
CO1	Describe the Importance of Shodhana in Swastha in relation to Sanchita& Asanchitha Dosha & Classify Swastha purusha as Sanchita dosha and Asanchita Dosha.	CC	MK	KH	L	M-CHT	S	I	
CO1	Explain the Physical, Mental and Social dimensions of health.	CK	MK	KH	L&GD	T- EW	S	I	
CO1,CO2	Describe the objective component of well-being - standard of living and level of living and subjective component of well-being - Quality of Life.	CK	MK	KH	L	T- EW	S	I	
CO1,CO2,CO7	Explain one health concept / Vasudhaiva Kutumbakam" or "One Earth · One Family One Future"	CK	DK	K	L	T- EW	F	I	

Topic 2 Healthy Life style -Dinacharya (Daily regimen) (Lecture :8 hours, Non lecture: 5 hours)									
CO1,CO2	Explain the Primordial, Primary, Secondary, and Tertiary Preventive measures in the context of Ayurveda with examples	CK	MK	KH	L&PPT,SDL	TT-Theory	F&S	I	
CO1,CO2	Explain the importance of Ahara and Vihara as the health promotive and disease preventive measures.	CK	MK	KH	L&PPT	TT-Theory	S	I	
CO1,CO2	Describe the importance of **Niyata kala vihara (**Dinacharya, Ritucharya) and **Aniyata kala Vihara** (Vegadharana, Vegaudirana, Ritushodhana, Brumhana and Bhutadi asparshanaa) for health promotion and disease prevention.	CAN	MK	KH	L&PPT	T- EW	S	I	
CO1,CO2	Explore and analyse the concept of waking up at 'Brahma muhurta'in the present scenario and the effect of early rise on health, sleep, alertness and memory	CAN	DK	KH	IBL	DEB	F	I	
CO1,CO2	Describe the time, quantity and benefits of 'Usha Jalapana' (Drinking water in early morning).	CC	MK	K	L&PPT	T- EW	S	I	
CO1,CO2	Explain the Importance of Malatyaga in vata kaala - early morning (Good Bowel Habits)	CK	MK	KH	L&PPT	TT-Theory	S	I	
CO1,CO2	Explain the procedure, dravyas and benefits of Mukhaprakshalana and face washes used currently.	CK	MK	KH	L&PPT	T- EW	F&S	I	
CO1,CO2	Describe the time, procedure, benefits, contraindications and herbs used as per rasa for dantadhavana and modern-day brushing techniques and dentifrices.	CC	MK	KH	L&PPT	T- EW	F&S	I	
CO1,CO2	Describe jihwanirlekhana, explain the tools used in today's era and their benefits.	CAP	MK	KH	SDL	TT-Theory	F&S	I	
CO1,CO2	Explain the Anjana dravyas for Swastha and their benefits	CK	MK	K	L	INT	F&S	I	V-

									SHL
CO1,CO2	Describe the occupation /activity in which Anjana can be used as a health promotive measure	CS	NK	KH	SDL	O-QZ	F	I	
CO1,CO2	Explain the dravyas used with their doses for Pratimarsha Nasya and their benefits.	CC	MK	KH	L&PPT	T- EW	F&S	I	V-PC
CO1,CO2	Describe the various kaal for administering Pratimarsha Nasya as per day and season (ritu)	CAP	MK	KH	L&PPT	P-VIVA	F&S	I	V-PC
CO1,CO2	Describe the occupation /activity in which Pratimarsha Nasya can be used as a health promotive measure.	CAP	MK	KH	L&GD	INT	F&S	I	V-PC
CO1,CO2	Describe the ingredients, procedure and benefits of kavala and gandusha for oral hygiene including mouthwashes available in the market	CAP	MK	KH	L&PPT	TT-Theory	F&S	I	
CO1,CO2	Mention different snehas/oils to be used for daily abhyanga as per seasons and geographical variations.	CK	MK	K	L&PPT	INT	F&S	I	
CO1,CO2	Justify the importance of the classical tambula by comparing it with the present-day betel chewing.	CE	DK	KH	TBL	TT-Theory	F	I	
CO1,CO2	Explain the practical application of Prayogika Dhoomapana (inhalation of herbal fumes/ herbal inhalers) with their benefits and contraindications	CAP	MK	SH	BL	TT-Theory	S	I	
CO1,CO2	Explain the ill effects of tobacco smoking of various sorts viz. beedi, cigarette, hookah on health	CAP	MK	KH	ECE	P-CASE	F&S	I	
CO1,CO2	Describe the applied aspects of Sarvanga Abhyanga, Padabhyanga, Shiroabhyanga and	CAP	MK	KH	DIS	T- EW	F&S	I	V-PC
CO1,CO2	Explain the application of Abhyanga according to different age groups and occupation/activity.	CAP	DK	KH	SDL	T-CS	F	I	V-PC

CO1,CO2	Explain the indications, contraindications and benefits of Vyayama.	CK	MK	KH	L&PPT	T- EW	F&S	I	
CO1,CO2	Describe the types & benefits of vyayama and present-day practices such as aerobic exercises, muscle strengthening exercises etc.to be practiced as per prakriti, age and occupation.	CAP	MK	KH	DIS	CR-RED	F&S	I	
CO1,CO2	Describe the assessment of ardhashakti lakshanas of vyayama and the consequences of ati vyayama.	CE	MK	KH	DIS	TT-Theory	F&S	I	
CO1,CO2	Describe and compare the dravyas, benefits, and application of Udvartana, Udgharshana and Utsadana.	CAN	MK	KH	L&PPT	M-CHT	F&S	I	V-KC
CO1,CO2	Explain the physiological effects of snana on body and mind and explain the reasons for contraindications of Snana.	CAN	MK	KH	L&PPT	CR-W	F&S	I	
CO1,CO2	Explain the importance and benefits of Anulepana.	CK	MK	KH	L&PPT	P-VIVA	F&S	I	
CO1,CO2	Describe the merits and demerits of present-day applications like face powder, face pack, balm, lotions, lipsticks, deodorants and perfumes.	CAP	NK	KH	PrBL	CL-PR	F	I	
CO1,CO2	Explain the importance of proper clothing (vastradharana) in social life.	CK	MK	KH	L&PPT	INT	F&S	I	
Topic 3 Ratricharya (Lecture :6 hours, Non lecture: 1 hours)									
CO1,CO2	Describe ratri bhojanvidhi and its relation to health.	CK	MK	KH	L&PPT	T- EW	F&S	I	
CO1,CO2	Describe ratri shayana vidhi in relation to the proper time of sleep.	CK	MK	KH	L&PPT	T- EW	F&S	I	
CO1,CO2	Explain the relation between Nidra and health.	CK	MK	KH	L&PPT	T- EW	F&S	I	

CO1,CO2	Describe effects of Yukta & Ayukta nidra.	CK	MK	KH	L&PPT	T- EW	F&S	I	
CO1,CO2	Explain the effects of Ratri Jagarana, Diwaswapna, Anidra, Atinidra and Akala Nidra.	CK	MK	K	L&PPT	T- EW	F&S	I	
CO1,CO2	Identify Ahara and Vihara Causing sound sleep as well as disturbed sleep.	CAN	DK	KH	SDL	INT	F	I	
CO1,CO2	Formulate the duration of sleep according to age, Sleep in healthy and ailing persons.	CE	DK	KH	SDL	INT	F	I	
CO1,CO2,CO8	Explain various Aspects of Sleep like: a. Daytime Sleepiness and Alertness b. Sleep Deprivation c. Sleep and Host Defense d. Master Circadian Clock and Master Circadian Rhythm e. Human Circadian Timing System and Sleep-Wake Regulation f. Circadian Rhythms in Sleepiness, Alertness, and Performance g. Circadian Disorders of the Sleep-Wake Cycle	CK	DK	KH	L&PPT	C-INT	F	I	
CO1,CO2,CO8	Explain Sleep apnoea , insomnia, narcolepsy and restless leg syndrome. Explain solutions to Asatmya jagarana (sleep disorders .)	CK	DK	KH	L&PPT	C-INT	F	I	
CO1	Explain the importance of observing brahmacharya and abrahmacharya in relation to health	CAP	MK	KH	L&GD	TT-Theory	F&S	I	
CO1	Describe Brahmacharya with specail reference to lifestyle guidelines	CAP	MK	KH	L&GD	TT-Theory	F&S	I	
CO1	Describe reproductive and sexual health according to Ayurveda	CAP	MK	KH	L&GD	TT-Theory	F&S	I	
Topic 4 Ritucharya (Lecture :5 hours, Non lecture: 2 hours)									

CO1	Explain classification of kaala , distinguish Adana kala and visarga kala , identification of seasons based on the ritu lakshanas in different geographical areas.	CAP	MK	K	L&PPT	M-CHT	F&S	I	
CO1	Analyse the Sanchaya- Prakopa- Prashamana of Dosha with their gunas in each ritu.	CAN	MK	K	L&PPT	PUZ	F&S	I	
CO1	Describe the Relation of Agni , Bala and Ritu with its application.	CAP	MK	K	L&PPT	CL-PR	F&S	I	
CO1	Explain ritu shodhana for the prevention of diseases.	CC	MK	KH	L	T- EW	F&S	I	
CO1	Analyse Pathya - Apathya in regards to Ahara -Vihara in all six ritus in present scenario.	CAN	MK	K	FC	CL-PR	F&S	I	
CO1	Explain the importance of ahara and vihara in ritu sandhi and yamadanshtra kala.	CK	MK	KH	SDL	T- EW	F&S	I	
CO1	Describe rituharitaki as a rasayana with research updates.	CE	DK	K	SDL	CR-RED	F	I	
CO1	Explain the effects of Rituviparyaya on health and its relation to janapadaudhwansa/maraka vyadhis with present day examples.	CAP	MK	K	L&PPT	CL-PR	F&S	I	
Topic 5 Roganutpadaniya (Lecture :2 hours, Non lecture: 1 hours)									
CO1,CO2	Explain vegadharana and vega-udirana in relation to health and morbidity.	CK	MK	K	L&PPT	T- EW	F&S	I	
CO1,CO2	Compare the symptoms and management principles of adharaniya vega janya vyadhis from bruhattrayee.	CAN	MK	K	L&PPT	T- EW	F&S	I	
CO1,CO2	Explain with examples the concept of vega-udirana (viz. Use of snuffing powder, forcible evacuation of bowels & bladder etc.).	CK	MK	K	L&PPT	T- EW	F&S	I	
CO1,CO2	Explain the importance of dharaniya vegas in promotion of	CK	MK	K	L&PP	T- EW	F&S	I	

	mental health.				T				
Topic 6 Sadvritta (Lecture :2 hours, Non lecture: 1 hours)									
CO1	Describe digital health	CK	DK	KH	L&GD	TT-Theory	F&S	I	
CO1,CO2	Explain Promotion of Digital health	CAP	DK	KH	L&GD	TT-Theory	F&S	I	
CO1,CO2	Describe Digital health problems	CAP	DK	KH	DIS	PP-Practical	F&S	I	V-SHL
CO1,CO2	Understand and adopt the Sadavritta measures for the maintenance of personal ,social and spiritual health.	AFT-VAL	DK	D	RP	INT	F	I	
CO1,CO2	Explain how the observance of Sadvritta helps for the prevention of Adharma.	CC	MK	KH	DIS	T- EW	F&S	I	
CO1,CO2	Describe 'Achara Rasayana" and its role in the prevention and control of diseases.	CK	MK	K	L&PPT	TT-Theory	F&S	I	
CO1,CO2	Explain characteristics of a mentally healthy person, warning signals of poor mental health, types of mental illness and causes of mental ill-health.	CK	MK	K	L&PPT	TT-Theory	F&S	I	
CO1,CO2	Describe the mental health services and comprehensive mental health programme.	CK	MK	K	L&PPT	TT-Theory	F&S	I	
CO1,CO2	Explain the role of trigunas and satvavajaya in mental health promotion in present era.	CAP	DK	KH	CBL	INT	F	I	V-KC
Topic 7 Ahara (Lecture :20 hours, Non lecture: 15 hours)									
CO1	Explain significance of Ahara for health and well-being according to Ayurveda & Contemporary science Explain	CK	MK	K	L	T- EW	F&S	I	

	significance of Ahara for health and well-being according to Ayurveda & Contemporary science								
CO1	Classify aharadravyas as per Ayurveda & Contemporary science	CK	MK	K	L&PPT	T- EW	F&S	I	
CO1	Enumerate and explain the features of Ahara vidhividhana, Ahara sevanakala &Dwadashashanapravicharana .	CK	MK	K	L&PPT	T- EW	F&S	I	
CO1	Discuss the applied aspect of Pathyahara, Apathyahara, Samashana, Adhyashana, Vishamashana. Discuss the Ahara &vihara leading to Santarpanajanya evam Apatarpanajanyavyadhi and importance of upavasa and effects of practice of intermittant fasting on health	CAN	MK	KH	L&PPT	T- EW	F&S	I	
CO1	Explain the benefits of Shadrasabhojana	CAP	MK	KH	L&PPT	T- EW	F&S	I	
CO1	Enumerate and explain the importance of Ashtaharavidhiviseshayatanani in present era	CK	MK	KH	L&PPT	T- EW	F&S	I	
CO1	Explain the importance of Nityasevaniyadravyas in the maintenance of health	CAP	MK	KH	L&PPT	T- EW	F&S	I	H-DG
CO1	Explain the properties (Guna& karmas) of Ahara dravyas in the following vargas with their nutritive value:Dhanyavarga – Shuka Dhanya (Cereals and Millets), Shami Dhanya (Pulses), Shaka and Haritavarga (Leafy and Non leafy vegatables), Kanda varga (roots and tubers), Phalavarga (Fruits), Taila varga (Fats and Oils), Ikshuvarga (Sugarcane Products)&Madyavarga(Alcoholic Beverages), Dugdhavarga (Milk and Milk products), Ahara UpayogiVarga (Spices & Condiments), Kritannavarga(Prepared Food), Mamsavarga (Meat types) and JalaVarga	CC	MK	KH	L&PPT	T- EW	F&S	I	H-DG

CO1	Define Pro-biotics and Pre-biotics and explain their utility	CK	DK	KH	IBL	INT	F	I	
CO1	Explain the Proximate principles of Food, Recommended Daily Allowance according to various conditions, Sources, and deficiency diseases of Protein, Carbohydrate, Fats, Vitamins, and Minerals.	CC	MK	K	L_VC	COM	F&S	I	
CO1	Define Balanced diet and explain diet for an individual depending on age, body weight and physiological status and explain the Social Aspects of Nutrition	CK	MK	KH	L&GD	T- EW	F&S	I	
CO1	Explain Food hygiene, Sanitation of eating places, Preservation of food, Food handlers, Foodborne diseases, Food fortification, Food adulteration, and Food toxicants	CC	NK	KH	L&PPT,ML	P-REC,CHK	F	I	
CO1	Explain Milk Hygiene, Milk composition, Source of infection for Milk, Milk borne diseases, Clean and Safe milk and Pasteurization of milk	CC	DK	KH	L&PPT,ML	P-REC,CHK	F	I	
CO1	Explain Meat Hygiene, Meat inspection, Slaughterhouse and Freshness of fish and egg	CC	DK	KH	L&PPT,ML	P-REC,CHK	F	I	
CO1	Explain safety and hygiene measures for Fruits and Vegetables	CC	NK	K	ML	O-QZ	F	I	
CO1	Formulate a Pathya-Apathya diet for prevention of lifestyle disorders such as Obesity, Diabetes mellitus,Cardiovascular diseases andAcid peptic diseases	CAP	DK	D	SDL	P-REC,CHK	F	I	
CO1	Describe Food safety and standards regulation(Ayurveda Ahara Regulations), 2022 and Food safety and standards Act, 2006.	CK	NK	K	ML	INT	F	I	
CO1	Explain different Dietary Supplements and Ergogenic Aids	CK	NK	K	IBL	TT-Theory	F	I	
CO1	Explain the impact of different dietary patterns: Mediterranean	CC	NK	KH	L&G	INT	F	I	

	diet, Keto Diet, DASH diet, the MIND diet, Vegan diet, Ovo-lacto-vegetarian, pesco-vegetarian, plant-based diet, Intermittent diet, the Nordic diet, importance of organic foods, merits and demerits of genetically modified foods				D				
CO1	Describe the Slow and Fast foods . Explain the impact of cooking processes like boiling, steaming, sautéing, fermenting etc. (samskara) on health and effect of instant foods like Maggi etc,..	CC	NK	KH	DIS	TT-Theory	F	I	
CO1	Define Nutraceuticals, Nutrigenomics, Nutrigenetics	CK	DK	K	L&PPT	T- EW	F	I	
CO1	Explain the concept of Viruddhaahara with classical and modern-day examples and the application of this in the prevention of diseases	CK	MK	KH	ECE	T- EW	F&S	I	H-AT
Topic 8 Rasayana for Swastha (Lecture :2 hours, Non lecture: 2 hours)									
CO1	Explain the importance of lifestyle counselling with its methods	CC	NK	K	L&GD	TT-Theory	F&S	I	
CO1	Define Rasayana and mention the benefits of Rasayana	CK	MK	K	L&PPT	T- EW	F&S	I	
CO1	Classify the types of Rasayana with examples	CK	MK	K	L&PPT	T- EW	F&S	I	
CO1	Explain Urjaskara Rasayanas as per age and occupations /Activities	CAP	MK	K	L&GD	T-CS	F&S	I	
CO1	Explain the antioxidant&immunomodulatory effects of Rasayana with reference to research articles	CC	NK	K	L&GD	CR-RED	F	I	
Topic 9 Yoga (Lecture :22 hours, Non lecture: 6 hours)									
CO1	Describe adverse effects of improper Yoga practices	CK	DK	KH	L&G	TT-Theory	F&S	II	

					D				
CO3	Describe Global importance of International Day of Yoga (IDY)	CK	NK	K	L&PPT	INT	F	II	
CO3	Explain the etymology / derivation of the word 'Yoga' .	CK	MK	K	L&PPT	T- EW	F&S	II	
CO3	Define Yoga according to Patanjali Yogasutras, Bhagavad Gita and Charaka Samhita.	CK	MK	K	L&PPT	TT-Theory	F&S	II	
CO3	Distinguish between Rajayoga, Hathayoga and Karmayoga.	CAN	MK	KH	L&PPT	M-CHT	S	II	
CO3	Explain Yogabhyasa Pratibhandhakas and Yoga Siddhikarabhavas.	CK	MK	K	L&PPT	T- EW	F&S	II	
CO3	Describe Mitahara and Pathya-apathyas during Yogabhyasa.	CC	MK	KH	L&PPT	T- EW	F&S	II	
CO3	Explain Panchakosha theory.	CC	MK	KH	L&PPT	M-POS	F&S	II	
CO3	List out the Ashtangas of Yoga.	CK	MK	K	L&PPT	T- EW	F&S	II	
CO3	Describe Yama and Niyama with meaning according to Yogasutras and Hathayogapradipika.	CC	MK	K	L&PPT	T- EW	F&S	II	
CO3	Define Asana and explain the importance of asana. Distinguish between asana and physical exercise.	CK	MK	K	L&PPT	TT-Theory	F&S	II	
CO3	Describe the procedure, benefits, indications, and contraindications of Standing Yoga Postures such as Ardhakatichakrasana, Padahastasana, Ardhachakrasana, and Trikonasana.	CC	MK	KH	L_VC	PRN	F&S	II	

CO3	Describe the procedure, benefits, indications and contraindications of Sitting Yoga postures such as Swasthikasana, Gomukhasana, Padmasana, Vajrasana, Bhadrasana, Shashankasana, Ushtrasana, Pashchimottanasana, Suptavajrasana, Ardhamatsyendrasana, and Siddhasana.	CC	MK	KH	L_VC	PRN	F&S	II	
CO3	Decsribe the procedure, benefits, indications and contra indications of Supine Yoga postures such as Pavanamuktasana, Sarvangasana, Matsyasana, Halasana, Chakrasana, Shavasana and Setubandhasana.	CC	MK	KH	L_VC	PRN	S	II	
CO3	Describe the procedure, benefits, indications, and contraindications of Prone Yoga postures such as Bhujangasana, Shalabhasana, Dhanurasana, and Makarasana.	CC	MK	KH	L_VC	PRN	F&S	II	
CO3	Describe the procedure, benefits and contraindications of Suryanamaskara.	CC	MK	KH	L_VC	PRN	S	II	
CO3	Define pranayama and explain its types, benefits, time of practice, and avara-pravara-madhyamalakshanas.	CC	MK	KH	L&PPT	T- EW	F&S	II	
CO3	Describe the procedure of Nadishudhi Pranayama, its benefits, and Nadishudhilakshana.	CC	MK	KH	L_VC	PRN	S	II	
CO3	Enumerate the Kumbhakabhedas.	CK	MK	K	L&PPT	TT-Theory	S	II	
CO3	Describe the procedure and benefits of Suryabhedana, Ujjayi, Sheetali, Sitkari, Bhastrika, Bhramari,Murcha, and Plavini.	CC	MK	KH	L_VC	PRN	F&S	II	
CO3	Enlist Shatkarmas of Yoga , indications and their importance.	CK	MK	K	L&PPT	TT-Theory	S	II	
CO3	Describe the procedure, benefits, indications, contraindications, and precautions of Dhauti, Basti, Neti, Trataka, Nauli, and	CC	MK	KH	L_VC	T- EW	S	II	

	Kapalabhati.								
CO3	Explain the term bandha & Describe the procedure and benefits of Mulabandha, Jalandharabandha, and Uddiyanabandha.	CC	MK	KH	L_VC	T- EW	S	II	
CO3	Describe Mudras and explain the benefits of Shanmukhi mudra andJnana mudra .	CC	DK	KH	L_VC	T- EW	F	II	
CO3	Describe Shatchakras and explain their importance in Yoga practice.	CAP	DK	KH	L&PPT	T-OBT	F	II	
CO3	Describe Ida-pingala-sushumna nadis and their importance in yoga practice.	CAP	NK	K	L&PPT	T- EW	F	II	
CO3	Define Pratyahara and explain its importance in Yoga practice.	CAP	MK	KH	L&PPT	TT-Theory	S	II	
CO3	Define Dharana and explain its importance in Yoga practice.	CAP	MK	KH	L&PPT	TT-Theory	S	II	
CO3	Define Dhyana and explain its importance in Yoga practice.	CAP	MK	KH	L&PPT	TT-Theory	S	II	
CO3	Describe Cyclic Meditation and Mindfulness meditation and their benefits.	CAP	DK	KH	L&PPT,L_VC	CL-PR	F	II	
CO3	Define Samadhi and explain its types and importance.	CK	MK	K	L&PPT	TT-Theory	S	II	
CO3	Define Moksha according to Charaka and explain Muktatmalakshana and Moksha upayas.	CK	DK	K	L&GD	INT	F	II	
Topic 10 Naturopathy (Lecture :5 hours, Non lecture: 4 hours)									
CO3	Explain the basic principles of Naturopathy.	CK	DK	K	L&PP	INT	F&S	II	

					T				
CO3	Describe the concept of Panchabhutopasana.	CK	DK	KH	L&PPT	INT	F&S	II	
CO3	Explain the procedure and therapeutic effects of Mud therapy.	CAP	MK	KH	L_VC	TT-Theory	F&S	II	
CO3	Explain the procedure and therapeutic benefits of Sun bath.	CAP	MK	KH	L_VC	TT-Theory	F&S	II	
CO3	Explain Fasting therapy and its types and benefits.	CK	MK	KH	L&PPT	TT-Theory	F&S	II	
CO3	Explain hydrotherapy, types of water used based on the temperature and therapeutic effects of Hydrotherapy.	CAP	MK	KH	L_VC	TT-Theory	F&S	II	
CO3	Describe types , methods and benefits of massage.	CAP	MK	KH	L_VC	TT-Theory	F&S	II	

Paper 2 Public health									
A3 Course outcome	**B3** Learning Objective (At the end of the session, the students should be able to)	**C3** Domain/sub	**D3** Must to know / desirable to know / Nice to know	**E3** Level Does/ Shows how/ Knows how/ Know	**F3** T-L method	**G3** Assessment (Refer abbreviations)	**H3** Formative/ summative	**I3** Term	**J3** Integration
Topic 1 Janapadodhwamsa / Maraka Vyadhi (Lecture :37 hours, Non lecture: 10 hours)									
CO1	Understanding the Epidemic Diseases (Amendment) Ordinance	CK	MK	KH	L&G	TT-Theory	F&S	II	

	Act,2020 .,				D				
CO1	Explain the causes of Janapadodhwamsa/ maraka vyadhi State the manifestation and control measures of Jnapadodhwamsa Explain the importance of Panchakarma and Rasayana in preventing Janapadodhwamsa	CK	MK	KH	L&PPT	T- EW	F&S	I	
CO1	Define Epidemiology, enumerate and describe the principles and uses of epidemiology.	CK	MK	KH	L&GD	T- EW	S	I	
CO3	Describe the basic terms of epidemiology.Explain and discuss the dynamics of disease transmission.Explain the theory of disease causation, epidemiological triad and natural history of disease.	CK	MK	KH	L&PPT	T- EW	S	II	
CO2	Explain the concept of prevention, modes of intervention, risk factors, incidence and prevalence.	CK	MK	KH	L&PPT	T-EMI	S	II	
CO2	Explain Susceptible host and host defense.Describe Immunizing Agents.Explain the concept of vyadhikshamatwa.Enlist methods to improve Vyadhikshamatwa.Classify Bala, enlist factors of Bala vriddhikara bhava.	CK	MK	KH	L&PPT	T- EW	F&S	II	
CO2	Explain the investigation of an epidemic. Explain prevention and control of an epidemic.	CK	MK	KH	L&PPT	T- EW	F&S	II	
CO1	Explain Sankramaka roga as per Ayurveda.	CK	MK	K	L&PPT	T- EW	S	II	
CO2	Explain Epidemiological determinants, brief pathology ,transmission, incubation period , clinical features, diagnosis and preventive measures of 1.Droplet Infections such as Chicken Pox, Measles, Rubella, Diphtheria, Pertussis, Mumps, Tuberculosis, SARS, Influenza, Pneumonia, Covid-19 and Leprosy	CK	MK	KH	L&PPT,EDU,D_BED	T- EW	F&S	II	

CO2	2.Water borne Infections / intestinal infections - Cholera, Polio, Viral Hepatitis, Typhoid	CK	MK	K	L&PPT,D_BED	T- EW	S	II	V-KC
CO2	3.Intestinal infestations – Ascariasis, Hook worm ,Tape worm4. Emerging and re-emerging diseases.Explain Role of Ayurveda in Epidemics like COVID-19, Zika Virus , H1N1,H3N2,etc	CK	MK	KH	L&GD,D_BED	T- EW	S	II	
CO2	5.Sxually transmitted diseases (STDs) with prevention and control - HIV/ AIDS, Syphilis and Gonorrhea.	CK	MK	KH	L&GD,D_BED	T- EW	S	II	
CO2	Explain the role of Ayurveda in the prevention and control with recent research updates of Lifestyle diseases such as DM,Obesity, Coronary artery disease (CAD) and Cancer	CK	MK	KH	L&PPT,D_BED	T- EW	S	II	
Topic 2 Environmental health (Lecture :10 hours, Non lecture: 5 hours)									
CO1	Understanding the Environment protection Act,1986	CK	MK	KH	L&GD	TT-Theory	F&S	II	
CO1	Describe the properties of Vayu and state the composition of air.	CK	DK	KH	L	INT	F	II	
CO1	Specify the changes in air of the occupied room.	CK	DK	KH	L	INT	F	II	
CO1	Explain comfort zone and indices of thermal comfort.	CK	DK	KH	L	INT	F	II	
CO2	Comprehend the causes, prevention and control of air pollution. Discuss the effects of air pollution on health and social aspects	CC	DK	KH	L	DEB	F	II	
CO2	Elaborate the effects of Global warming with recent updates	CAP	DK	KH	L&GD	CR-RED	F	II	
CO2	Define ventilation and illustrate its types.	CAP	DK	KH	L&GD	DEB	F	II	

CO2	Explain the effects of high altitude and mountain air on health.	CAP	DK	KH	L&GD	DEB	F	II	
CO1	Explain safe and wholesome water and state water requirements.	CK	MK	KH	L&PPT	TT-Theory,VV-Viva	F&S	II	
CO1	Explain the properties of water from different sources.	CK	MK	KH	L&PPT	TT-Theory,VV-Viva	F&S	II	
CO1,CO6	Explain water pollution and health hazards.	CAP	MK	KH	L&PPT,DIS	CL-PR	F&S	II	
CO1,CO6	Describe the contemporary methods of water purification along with Ayurvedic methods.	CAP	MK	KH	L&PPT,DIS	CL-PR	F&S	II	
CO1,CO6	Elucidate the effects of Hard Water on health and methods of removal of hardness.	CAP	MK	KH	L&PPT,DIS	CL-PR	F&S	II	
CO7	Describe the quality of water stored in different vessels as per classics.	CAP	DK	SH	L	DEB	F	II	
CO7	Explain the rain water harvesting methods and its importance	CAN	NK	SH	L	DEB	F	II	
CO7	Enlist the types of soil.	CK	DK	KH	L&PPT	INT	F	II	
CO7	Interpret the relation between soil and health.	CK	DK	KH	L&PPT	INT	F	II	
CO7	Explain Land pollution and its prevention and control	CK	DK	KH	L&PPT	INT	F	II	
CO7	Explain land purification as per the classics.	CAN	NK	KH	L&GD	T-OBT	F	II	
CO7	Explain the Social goals of Housing and Housing	CE	DK	KH	L&G	T- EW	F	II	

	standards. Understanding of The building and other construction workers Act,1996				D				
CO7	Analyze the effects of housing on health.	CE	DK	KH	L&GD	T- EW	F	II	
CO7	Explain overcrowding and its impact on health	CE	DK	KH	L&GD	TT-Theory	F	II	
CO7	Explain good lighting, natural lighting and artificial lighting	CK	DK	KH	L&PPT	M-POS	F	II	
CO7	Explain the biological effects of lighting.	CK	DK	KH	L&PPT	M-POS	F	II	
CO7	Define noise. Illustrate its sources, effects on health and control measures.	CK	DK	KH	L&PPT	PRN	F	II	
CO7	Enlist the sources of Radiation and explain its effects on health and describe control measures.	CK	DK	KH	L	PRN	F	II	
CO7	Enlist Different types of solid waste and Explain the Storage and collection of refuse.	CK	MK	KH	L,D-M	TT-Theory	S	II	
CO7	Explain the Methods of disposal of solid waste (Rural & urban)	CK	MK	KH	D-M	M-MOD	S	II	
CO7	Describe Bio-medical waste management and Bio-Medical waste management rules, 2016	CK	MK	KH	D-M	TT-Theory	S	II	
CO7	Enlist excreta Disposal methods and explain Sanitary Latrines	CAN	DK	KH	D-M	DEB	F	II	
CO7	Explain the Modern Sewage disposal method	CAN	DK	KH	D-M	DEB	F	II	
CO7	Describe the disposal methods of Excreta during camps, fairs, and festivals	CAN	DK	KH	D-M	DEB	F	II	

Topic 3 Disaster management (Lecture :1 hours, Non lecture: 2 hours)									
CO5	Define disaster and explain disaster management	CK	DK	KH	L&GD	PRN	F	II	
CO5	Explain effects of natural and man-made disasters	CK	DK	KH	L&GD	PRN	F	II	
CO2	Explain epidemiologic surveillance and identify disease control measures	CAP	DK	KH	L&GD	PRN	F	II	
Topic 4 Occupational Health (Lecture :3 hours, Non lecture: 3 hours)									
CO1	Understand the Merchant Shipping / Medical Examination Rules, 2000	CK	DK	KH	L&GD	TT-Theory	F	II	
CO7,CO8	Define Occupational Health and Ergonomics.	CK	MK	K	L&GD	TT-Theory	F&S	II	
CO7,CO8	Explain occupational Hazards.	CK	MK	K	L&GD	T- EW	F&S	II	
CO7,CO8	Enlist occupational diseases and explain their prevention & control.	CK	MK	K	L&GD	T- EW	F&S	II	
CO1	Explain ESI Act, 1948 and The factories Act,1948	CK	MK	K	L&PPT	T- EW	S	II	
CO1	Describe the role of Ayurveda in various Occupational health problems.	CK	MK	KH	L&GD	TT-Theory	S	II	
Topic 5 School health services (Lecture :2 hours, Non lecture: 3 hours)									
CO2	State the Health problems of school children.	CC	MK	KH	L&PPT	T- EW	F&S	II	

CO2	Mention the aspects of school health services.	CC	MK	KH	L&PPT	T- EW	F&S	II	
CO2	Mention the duties of school medical officers.	CC	MK	KH	FV	T- EW	F&S	II	
CO2	Explain how to Maintain a healthy environment in the school.	CC	MK	KH	FV	T- EW	F&S	II	
Topic 6 Disinfection (Lecture :2 hours, Non lecture: 3 hours)									
CO1,CO2,CO6,CO7	Define the term disinfection	CK	MK	K	L	TT-Theory	F&S	II	
CO1,CO2,CO6,CO7	Enlist and explain the types of disinfection.	CK	MK	K	L&PPT	P-VIVA,P-PS	F&S	II	
CO1,CO2,CO6,CO7	Describe the Natural agents, Physical agents, and chemical agents of disinfection	CK	MK	K	L&PPT	T- EW	F&S	II	
CO1,CO2,CO6,CO7	Demonstrate the recommended disinfection procedures of feces & urine, sputum, and room.	PSY-MEC	DK	KH	L_VC	P-VIVA,QZ	F	II	
CO1,CO2,CO6,CO7	Explain Ayurvedic disinfection methods.	CK	DK	K	L&PPT	QZ	F	II	
Topic 7 Primary health care (Lecture :2 hours, Non lecture: 1 hours)									
CO1,CO2,CO3,CO4,CO5,CO8	Define Primary Health Care.	CK	MK	K	L	TT-Theory	S	II	
CO1,CO2,CO3,CO4,CO5,CO8	Describe the principles and elements of primary health care and the levels of health care.	CK	MK	K	L&PPT	T- EW	F&S	II	
CO1,CO2,CO3,CO4,CO5,C	Describe the Structure at village, sub-centre, PHC, CHC, Rural hospital levels	CK	MK	K	L&PPT	T- EW	F&S	II	

O8									
CO1,CO2,CO3,CO4,CO5,CO8	Describe primary health care in Health insurance, Private agencies, Voluntary health agencies, NGOs, and the AYUSH sector	CK	DK	K	L&PPT	T-OBT	F	II	
CO1,CO2,CO3,CO4,CO5,CO8	Describe the role of Ayurveda in Primary Health Care.	CK	MK	K	L&PPT	TT-Theory	F&S	II	
Topic 8 Mother and Child health care (Lecture :1 hours, Non lecture: 1 hours)									
CO2,CO3,CO8	Describe the objectives of Maternal and Child Care services.	CK	MK	K	L	T- EW	F&S	II	
CO2,CO3,CO8	Explain the MCH problems & enlist the indicators of MCH care	CC	MK	K	L&PPT	T- EW	F&S	II	
Topic 9 Family welfare programme (Lecture :2 hours, Non lecture: 2 hours)									
CO4,CO5,CO6	Define demography and enlist the sources of demographic statistics in India.	CK	MK	K	L&PPT	TT-Theory	F&S	II	
CO4,CO5,CO6	Describe the demographic cycle & define life expectancy.	CK	MK	K	L&PPT	CL-PR	F&S	II	
CO2,CO4,CO5	Define family planning, eligible couple and target couple.Enlist & explain the objectives of family planning.	CK	MK	K	L&PPT	TT-Theory	F&S	II	
CO2,CO4,CO5	Explain the problems of population explosion and describe national population policy.	CK	MK	K	DIS	TT-Theory	F&S	II	
CO2,CO4,CO5	Classify and describe the Contraceptive methods (Fertility Regulating Methods).	CK	MK	K	L_VC	M-CHT	F&S	II	
Topic 10 Preventive Geriatrics (Lecture :1 hours, Non lecture: 1 hours)									

CO8	Enlist the health problems of the aged and explain their prevention and control measures	CK	MK	K	DIS	INT	F&S	II	
CO8	Explain the relation between lifestyle and healthy aging.	CC	MK	K	DIS	INT	F&S	II	
CO8	Describe the role of rasayana in preventive geriatrics.	CC	MK	K	L&PPT,W	INT	F&S	II	
Topic 11 World Health Organization and International health agencies (Lecture :3 hours, Non lecture: 1 hours)									
CO4	Define and describe the structure, regions, and works of the World Health Organization	CK	MK	KH	L&GD	T- EW,P-VIVA	F&S	III	
CO4	Describe the functions of various international health agencies - United Nations health agencies, bilateral health agencies, and Non- Governmental agencies	CK	MK	KH	L&GD	T- EW,P-VIVA	F&S	III	
CO4	Describe the contribution of the world health organization to the global acceptance of Ayurveda	CK	MK	KH	L&GD	T- EW,P-VIVA	F&S	III	
Topic 12 Vital Statistics (Lecture :1 hours, Non lecture: 1 hours)									
CO1	Understanding of Registration of Birth and Death Act, 1969	CK	MK	KH	L&GD	TT-Theory	F&S	II	
CO4,CO8	Define Vital Statistics. Enumerate the sources ofVital statistics	AFT-RES	MK	SH	DIS	T- EW,P-VIVA	F&S	III	
CO4,CO8	Describe Fertility , Morbidity and Mortality rates	AFT-RES	MK	SH	L&GD	T- EW,P-VIVA	F&S	III	

Topic 13 Health Administration (Lecture :2 hours, Non lecture: 1 hours)									
CO4,CO8	Describe the health administration including AYUSH at the Central, State, District, and Village levels	CK	DK	KH	L&GD	T- EW,P-VIVA	S	III	
Topic 14 National Health Programmes (Lecture :7 hours, Non lecture: 3 hours)									
CO4,CO8	State the vision/objective and outline the goals, strategies and plan of action of National Health Programs - Leprosy(NLEP), AIDS (NACP), Blindness (NPCB), Polio , National TB Elimination Program , Vector born disease control program, RCH program, ICDS program, Universal Immunization Program, National mental health program , National Program for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases & Stroke (NPCDCS) , Swachha Bharat mission, Ayushman Bharat Yojana, Ayushman Bharat Digital Mission, National health mission (NRHM&NUHM), National AYUSH Mission (NAM). National nutrition programs- National Iodine Deficiency Disorders Control program, National Iron Plus Initiative for Anemia Control, National Vitamin A prophylaxis program, Mid-Day Meal program & Balwadi nutrition program.	CK	MK	KH	L&PPT,DIS,FV	T- EW,P-VIVA	F&S	III	
Topic 15 National Health Policy (Lecture :1 hours, Non lecture: 1 hours)									
CO4	Describe the National Health Policy (NHP) and the scope of Ayurveda in NHP.	CK	MK	KH	L,L&PPT	T- EW,P-VIVA	F&S	III	

List of Practicals (Term and Hours)

PRACTICALS (Marks-100)			
S.No	**List of Topics**	**Term**	**Hours**
1	Dinacharya	1	25
2	Disinfectants	1	2
3	Ahara	1	30
4	Health Education (IEC)	2	10
5	Yoga performance	2	35
6	Community survey	3	20
7	Local Health Educational Visits	3	36
8	Visit to Observe National Health Programs and Ayurveda Centre	3	12
9	Monitoring of health and hygiene	1	5

Table 4: Learning objectives (Practical)

A4 Course outcome	B4 Learning Objective (At the end of the session, the students should be able to)	C4 Domain/sub	D4 Must to know / desirable to know / Nice to know	E4 Level Does/ Shows how/ Knows how/ Know	F4 T-L method	G4 Assessment (Refer abbreviations)	H4 Formative/ summative	I4 Term	K4 Integration
Topic 1 Dinacharya									
CO1	Collect and Compare different Dantadhawana Churnas/ Tooth pastes available in the market and choose/ advise the appropriate one based on the need.	PSY-ADT	DK	D	PrBL	PRN	F	I	
CO1	Collect and Compare different JiwhaNirlekhanaYantra(Tongue cleaners) available in the local area/ market and choose/advise the appropriate one for swastha	PSY-ADT	DK	D	PrBL	PRN	F	I	
CO1	Collect different dravya/kashaya/mouthwashes available in the market for kavala and gandusha; demonstrate the procedure of kavala and gandusha with appropriate liquids /dravyas for swastha	PSY-ADT	MK	D	PrBL, D,PRA	PRN	F&S	I	
CO1	Collect different types of Anjana (Collyriums) available in the market, Demonstrate Anjana procedure as per local traditions and	PSY-ADT	MK	D	PrBL, PT,D	PRN	F&S	I	

	advise different types of Anjana for swastha.								
CO1	Demonstrate Pratimarsha Nasya with Anutaila/ Sesame oil and prescribe the appropriate taila for Pratimarsha Nasya for swastha.	PSY-ADT	MK	D	PrBL, PT,D	DOPS	F&S	I	
CO1	Demonstrate Prayogika Dhoomapana and advise prayogika dhoomapana dravya for swastha.	PSY-ADT	MK	D	PrBL, PT,D	DOPS	F&S	I	
CO1	Demonstrate the procedure of Abhyanga techniques for full body abhyanga, padabhyanga and shiroabhyanga and prescribe suitable taila for Abhyana for Swatha.	PSY-ADT	MK	D	PrBL, PT,D	DOPS	F&S	I	
CO1	Demonstrate the procedure of Udwartana techniques and prescribe suitable dravya for Udwartana for Swatha.	PSY-ADT	MK	D	PrBL, PT,D	DOPS	F&S	I	
CO2	Prescribe appropriate dinacharya module regarding ahara and vihara as per age and occupation /activity.	CE	MK	SH	PrBL	P-CASE	F&S	I	
CO2	Advise /counsel people regarding healthy lifestyle based on the Ayurvedic principles (one student should counsel at least five person and should be documented).	CE	MK	SH	PrBL	P-CASE	F&S	I	
Topic 2 Disinfectants									
CO7	Identify and demonstrate the suitability, dose, dilution, and contact period of the following disinfectants:Bleaching powder, Dettol, Lysol, Savlon.	PSY-ADT	MK	SH	CBL	PP-Practical	S	II	
CO7	Observe the procedure of fumigation of the operation theatre.	AFT-REC	NK	D	D	P-VIVA	F	II	
CO7	Write the mode of working and uses of an autoclave.	CK	DK	KH	SDL	T- EW	F	II	

Topic 3 Ahara									
CO8	Collect and compile different regional staple food articles.	PSY-SET	MK	D	SDL	COM	F	I	H-DG
CO8	Mention the nutritive value of the following preparations per 100gm and calculate the food portions/serving size of the following recipes: a. Yusha b.Yavagu c.Odana d.Krushara e.Peya f.Panaka g.Takra h.Manda i.Vilepi	CE	MK	D	PT	P-EN	F&S	I	
CO8	Plan a dietary Menu according to different Prakriti (preparation of diet chart considering all ahara vargas for eka doshaja , dvidoshaja prakriti)	PSY-GUD	MK	SH	TBL	P-MOD,P-POS	F	I	
CO8	Plan the dietary menu for different occupations / Activities, Age groups, and physiological conditions. (diet chart for 1-5 years child, 6-18 years,18& above till 60 years, above 60 years, sedentary, sedentary intellectuals, night shifts , drivers, standing professionals. physiological conditions like Garbhini,Sutika, Kshirapa, Ksheerada, Ksheerannada, Annada etc,..)	PSY-GUD	MK	D	CBL	P-CASE	F&S	I	
CO8	Plan Ahara-Vihara based on the different Ritus(preparation of diet and lifestyle charts for each ritu)	PSY-GUD	MK	D	PrBL	M-CHT	F	I	
CO8	Plan a dietary menu for any one individual according to prakriti, agni, Sara, satva, age, sex, occupation/ activity, and season based on the regional food habits with serving sizes with different food exchange/options.	PSY-GUD	MK	D	IBL	P-CASE	F	I	
CO8	Document the maintenance of various equipment and appliances used in the kitchen/ diet section of the hospital such as cooking gas, pressure cooker, mixer-grinder, microwave oven, refrigerator	AFT-RES	NK	D	PL	PP-Practical	F	I	

CO8	Assess various Anthropometric variables like Weight, height, and BMI (including differentiation between Sara)and Mid-arm Circumference in order to assess the state of nutrition.	AFT-RES	MK	D	PSM	PP-Practical	F	I	
Topic 4 Health Education (IEC)									
CO5	Demonstrate communication methods for health education.	PSY-SET	MK	SH	DIS, W	P-RP,M-POS,OSPE ,DOPS	F&S	II	
CO5	Demonstrate/present different health education materials (dinacharya practices, sadvritta practices,family planning methods, breast feeding techniques, environmental hygeine, preventive and control measures of comuunicable and non - communicable diseases etc.) to the target population in the community.	AFT-RES	MK	SH	DIS,TPW,RP	DOPS,Log book	F&S	II	
Topic 5 Yoga performance									
CO3	Perform four Standing Postures namely - Ardhakatichakrasana, Padahastasana, Ardhachakrasana, and Trikonasana step by step with Sthiti, main procedure, and vishrama.	PSY-ADT	MK	SH	KL	DOPS	S	II	
CO3	Perform eleven Sitting Postures namely - Swasthikasana, Gomukhasana, Padmasana, Vajrasana, Bhadrasana, Shashankasana, Ushtrasana, Pashchimottanasana, Suptavajrasana, Ardhamatsyendrasana, and Siddhasana step by step with Sthiti, main procedure, and vishrama.	PSY-ADT	MK	SH	KL	DOPS	S	II	
CO3	Perform seven Supine Postures namely - Pavanamuktasana, Sarvangasana, Matsyasana, Halasana, Chakrasana, Shavasana, and Setubandhasana step by step with Sthiti, main procedure and visrama	PSY-ADT	MK	SH	KL	DOPS	S	II	
CO3	Perform four Prone Postures namely - Bhujangasana,	PSY-	MK	SH	KL	DOPS	S	II	

	Shalabhasana, Dhanurasana, and Makarasana step by step with Sthiti, main procedure and vishrama.	ADT							
CO3	Perform Nadishuddhi Pranayama with inhalation-retention-exhalation in the ratio of 1:4:2 in a comfortable sitting posture.	PSY-ADT	MK	SH	KL	DOPS	S	II	
CO3	Perform Kumbhakabhedas namely - Suryabhedana, Ujjayi, Sitkari, Sheetali, Bhastrika and Bhramari.	PSY-ADT	MK	SH	KL	DOPS	S	II	
CO3	Perform Jalaneti, Kapalabhati and Trataka.	PSY-ADT	MK	SH	KL	DOPS	S	II	
CO3	Demonstrate and instruct Common Yoga Protocol of IDY (International Day of Yoga).	PSY-ADT	DK	SH	EDU	DOPS	F	II	
Topic 6 Community survey									
CO6	Conduct minimum 05 Family surveys using structured questionnaire in specific rural populations and report the survey finding and discuss possible solutions to the family	PSY-SET	MK	D	ECE	DOPS	F&S	III	
CO6	Conduct minimum 05 Family surveys using structured questionnaire in specific urban populations and report the survey finding and discuss possible solutions to the family.	PSY-SET	MK	D	ECE	DOPS	F&S	III	
Topic 7 Local Health Educational Visits									
CO2	Report the functioning of milk dairy such as methods of processing and preservation of milk, testing of milk before and after pasteurization and the standards of milk & milk products.	PSY-SET	MK	KH	EDU, FV	P-VIVA,RK	F&S	III	
CO2,CO7	Report and explain the various process involved in large-scale water purification.	PSY-MEC	MK	KH	D-M,FV	P-VIVA,RK	F&S	III	
CO2,CO7	Explain and Report the processes involved in modern sewage treatment.	PSY-MEC	MK	KH	D-M,FV	P-EXAM,RK	F&S	III	

CO1,CO2,CO5,CO6,CO8	Explain and report the various measures adopted in the industry for the prevention and control of occupational diseases.	CC	MK	KH	TPW, FV	P-VIVA,RK	F&S	III	
CO1,CO2,CO8	Explain and Report the food safety standards and methods of food processing techniques.	CC	MK	K	PrBL, RLE, FV	P-VIVA,RK	F&S	III	
CO3,CO6	Report and explain various naturopathic treatment methods.	CC	MK	KH	L_VC ,EDU, FV	P-EXAM,RK	F&S	III	
Topic 8 Visit to Observe National Health Programs and Ayurveda Centre									
CO4,CO8	Report the functioning of National Health Programs at Primary health centers/Community health centers/District hospitals and Govt. Ayurveda Dispensary	PSY-SET	MK	SH	L_VC ,IBL, FV	T- EW,P-VIVA,RK	F&S	III	V-KC
CO4	Report the functioning of a Primary Health Centre/ Community Health Centre/ Rural Hospital/ District Hospital with regards to the implementation of different National Health Programmes viz. infectious disease control, immunization, ANC, Family planning etc.	AFT-RES	DK	D	FV	Log book	F	III	
CO4	Report the structure and functioning of an Ayurvedic Dispensary/ Taluk Hospital/ District Hospital available in the district.	AFT-RES	DK	D	FV	Log book	F	III	
Topic 9 Monitoring of health and hygiene									
CO2,CO6,CO7,CO8	Collect the demographic profile of allotted 2 subjects/Individuals (one from the community and one from employees of the college/hospital) and conduct clinical examination (Assess Prakriti, Sattva, Saara, etc.)	AFT-RES	MK	D	IBL	P-CASE,RK	F&S	I	
CO2,CO6,CO7,CO8	Conduct periodic check-ups for allotted individual/employer (2) health status / occupational health status and if any treatment	AFT-RES	MK	D	PT	P-CASE,OSCE	F	I	

	is prescribed then coordinate the treatment under the overall guidance of the Mentor								
CO2,CO6,CO 7,CO8	Counsel the adopted individuals/employer (2) and analyze the health trajectory(individual following the prescribed regimen) of the adopted individual/employer under the overall guidance of the mentor	AFT-RES	MK	D	PT	P-SUR,RK	F	II	
CO2,CO6,CO 7,CO8	Document the maintenance of water sanitation, waste disposal, food hygiene, etc,. in the hospital canteen/ pathya section/cafeteria	CE	MK	KH	PrBL	RK	F	I	

Table 4a: List of Practical

S.No	Name of practical	Term	Activity	Practical hrs
1	Dinacharya	1	1. Analyze the composition of different Dantadhawana Churnas/ Tooth pastes and tooth brushes available in the market 2. Analyze different Jivwa NirlekhanaYantra(Tongue cleaners) available in the local area/ market 3. Demonstrate the procedure of kavala and gandusha with appropriate liquids /dravyas for swastha 4. Demonstrate Anjana procedure as per local traditions and advise different types of Anjana for swastha. 5. Demonstrate Pratimarsha Nasya with Anutaila/ Sesame oil and prescribe the appropriate taila for Pratimarsha Nasya for swastha. 6. Demonstrate Prayogika Dhoomapana (Practicable and Non- practicable Dhoomapana)and advise prayogika dhoomapana dravya for swastha. 7. Demonstrate the procedure of Abhyanga techniques for full body abhyanga, padabhyanga and shiroabhyanga and prescribe suitable Taila for Abhyana for Swatha. 8.Demonstrate the procedure of Udwartana techniques and prescribe suitable dravya for Udwartana for Swatha. 9.Prescribe appropriate dinacharya module regarding ahara and vihara as per age and occupation /activity. 10.Advise /counsel people regarding healthy lifestyle based on the Ayurvedic principles (one student should counsel at least five person and should be documented).	25
2	Disinfectants	1	Identify and demonstrate the suitability, dose, dilution, and contact period of the following disinfectants : Bleaching powder, Dettol, Lysol, Savlon . Observe the procedure of fumigation of the operation theatre. Write the mode of working and uses of an autoclave.	2

3	Ahara	1	Collect, compile and document region wise different varieties of Ahara Varga (Millets, cereals, pulses, vegetables, varieties of milk/oil/honey/ available in the market). Demonstrate the therapeutic indication and nutritive values of Pathya kalpanas a. Manda b. Peya c. Vilepi d.Yavagu e.Odana f. Krishara g.Yusha h.Takra . Prepare the dietary regime according to different Prakriti. Prepare/Prescribe the dietary regime for different occupations / activities, age groups, and physiological conditions. Prepare/Prescribe the diet and lifestyle regimen(pathya- apathya) with reference to Ahara and Vihara for each ritu. Conduct diet counselling according to prakriti, agni, sara, satva, age, sex, occupation/ activity, and prevailing season based on the regional food habits with serving sizes with different food exchange/options for 5 persons. Assess various anthropometric variables like weight, height, and BMI and mid-arm circumference etc., in order to assess the state of nutrition of five individuals.	30
4	Health Education (IEC)	2	Demonstrate communication methods for health education. Demonstrate/ Present different health education materials (dinacharya practices, Sadvritta practices, family planning methods, breastfeeding techniques, etc.) patients and general public .	10
5	Yoga performance	2	Perform four Standing Postures namely - Ardhakatichakrasana, Padahastasana, Ardhachakrasana, and Trikonasana step by step with sthiti, main procedure and vishrama. Perform eleven Sitting Postures namely - Swasthikasana,Gomukhasana, Padmasana, Vajrasana, Bhadrasana, Shashankasana, Ushtrasana, Pashchimottanasana, Suptavajrasana, Ardhamatsyendrasana, and Siddhasana step by step with sthiti, main procedure and vishrama. Perform seven Supine Postures namely - Pavanamuktasana, Sarvangasana,	35

			Matsyasana, Halasana, Chakrasana, Shavasana, and Setubandhasana step by step with sthiti, main procedure and visrama Perform four Prone Postures namely - Bhujangasana, Shalabhasana, Dhanurasana, and Makarasana step by step with Sthiti, main procedure and vishrama. Perform Jalaneti and kapalbhati . Perform Anuloma – Viloma Pranayama in a comfortable sitting posture. Perform Nadishuddhi Pranayama with inhalation-retention-exhalation in the ratio of 1:4:2 in a comfortable sitting posture. Perform Kumbhakabhedas namely - Suryabhedana, Ujjayi, Sitkari, Sheetali, Bhastrika and Bhramari. Demonstrate and instruct Common Yoga Protocol of IDY (International Day of Yoga).	
6	Community survey	3	Conduct minimum 05 Family surveys using a structured questionnaire in specific rural populations and report the survey findings and discuss possible solutions to the family. Conduct minimum 05 family surveys using a structured questionnaire in specific urban populations and report the survey findings and discuss possible solutions to the family.	20
7	Local Health Educational Visits	3	Report the functioning of milk dairies such as methods of processing and preservation of milk, testing of milk before and after pasteurization, and the standards of milk & milk products. Report the various process involved in water purification plant. Report the processes involved in modern sewage treatment plant. Report the various measures adopted for the prevention and control of occupational diseases in any industry. Report the food safety standards and methods of food processing techniques adopted in any food industry. Report the various treatment modalities adopted in Naturopathy and Yoga canters. Note : Swasthavritta, Agada Tantra.	36

			Dravyaguna & Rasashastra - Combined out campus visits can be palled wherever feasible.	
8	Visit to Observe National Health Programs and Ayurveda Centre	3	Report the functioning of a Primary health centre/Community health centre/Rural hospital/District hospital with regards to the implementation of different National Health Programmes viz. infectious disease control, immunization, ANC, Family planning etc. Report the structure and functioning of a Ayurveda Dispensary/ Taluk Hospital /District Hospital available in the district.	12
9	Monitoring of health and hygiene	1	Conduct periodic check-ups , collect demographic profile and clinical examination of allotted 2 subjects/Individuals - Assess Prakriti, Satva, Sara, etc.)for their health status / occupational health status and if any treatment is prescribed then coordinate the treatment under the overall guidance of the teacher/Mentor. Counsel and advice the allotted 2 subjects a healthy regime prescription and analyze their health status after following the healthy regime under the overall guidance of the teacher/mentor. Document the maintenance of water sanitation, waste disposal including biomedical waste in the hospital.	5
			Total Hr	**175**

Activity

CO	Topic name	Activity Details	Hours #
CO1	Dinacharya	Demonstration, Making posters, Real-life experiences , Roleplay , We- based activities	5

		Example - Collection and analyze of different tooth paste/tooth brushes, mouth washes and collyriums available in the market including GMP pharmacies	
CO1	Ratricharya	Chart preparation and real-life experiences of Ratri bhojana and Sleep principles	1
CO1	Ritucharya	Assessment of changes happening in the human body in particular rituPoster preparation of food recipes in different ritus	2
CO1	Sadvritta	Role play	1
CO1	Ahara	Listing of Ahitakara (Junk) food habits, Gathering information of Organic farming and Organic food items , Application of Ashtaahara vidhivesesha ayatana in real life - Team base project, Roleplay , Presentation & Collection of Research updates in the field of Ayurvedic food	15
CO1	Roganutpadaniya	Survey and documentation on effect of Adharaneeya vega on different occupations	1
CO1	Rasayana for swastha	Poster making and Library work	2
CO1	Nidra	Survey on sleep and awakening patterns among the staff and students	1
CO7	Yoga	Participation in International day of Yoga , Poster presentation of Yogic practices as per diseases , Preparation of Short videos on Yoga and Conducting Quiz	7
CO2,CO5	Disaster management	Group discussion	2
CO1	Janapadodwamsa	Assignment , Symposiums and Problem-based learning	10
CO1,CO5	Environmental health	Seminars, Quiz andm PBL	5
CO3	Disinfection	PBL	3
CO2	Family welfare programe	Roleplay , Web-based learning and Discussion	2

CO7,CO8	Mother and child health care	PBL	1
CO8	Preventive geriatrics	Group discussion and Seminar	1
CO4,CO8	National health programs	Web-based learning , Assignments and Participating in celebration of health related days	3
CO3	School health services	Role play and Presentations	2
CO7,CO8	Occupational health	Poster making , PBL and Group discussion	3
CO2,CO3,CO4,CO5 ,CO8	**Primary health care**	Group discussions	2
CO3	Naturopathy	Web-based learning , Tutorials and Group disussions	4
CO4	World health organizations and International health agencies	Web-based learning and Quiz	1
CO8	Health Statistics	Presentations and Seminars	1

Hours indicated are included in calculations of Table 3 and 4

Table 5- Teaching learning method

Sr No	Teaching learning methods in the course	No of Activities
1	Lecture	14
2	Lecture with Power point presentation	61
3	Lecture & Group Discussion	16
4	Lecture with Video clips	15

5	Discussions	6
6	Inquiry-Based Learning	1
7	Project-Based Learning	1
8	TBL	1
9	Flipped classroom	1
10	Blended Learning	1
11	ECE	1
12	Self-directed learning	8
13	Demo on Model	6

These are overall teaching learning methods listed in Table 3 and 4. Teachers can select the best possible method amongst the given methods as per objective, available time etc.

Table 6: Assessment Summary: Assessment is subdivided in A to H points

6 A-Number of Papers and Marks Distribution

Subject Code	Papers	Theory	Practical/Clinical Assessment					Grand Total
			Practical	Viva	Elective	IA	Sub Total	
AyUG-SW	2	200	100	60	10	30	200	400

6 B - Scheme of Assessment (formative and Summative)

PROFESSIONAL COURSE	DURATION OF PROFESSIONAL COURSE		
	First Term (1-6 Months)	Second Term (7-12 Months)	Third Term (13-18 Months)
Second	3 PA & First TT	3 PA & Second TT	3 PA & UE**

PA: Periodical Assessment; **TT:** Term Test; **UE:** University Examinations.

** University Examination shall be on entire syllabus

6 C - Calculation Method for Internal assessment Marks

TERM	PERIODICAL ASSESSMENT*					TERM TEST**	TERM ASSESSMENT	
	A 6	B	C	D	E	F	G	H
	1 (15 Marks)	2 (15 Marks)	3 (15 Marks)	Average (A+B+C/ 3)	Converted to 30 Marks (D/15*30)	Term Test (Marks converted to 30)	Sub Total _/60 Marks	Term Ass essment (…./30)
FIRST							E+F	(E+F)/2
SECOND							E+F	(E+F)/2
THIRD						NIL		E
Final IA	Average of Three Term Assessment Marks as Shown in 'H' Column.							
	Maximum Marks in Parentheses *Select an Evaluation Method which is appropriate for the objectives of Topics from the Table 6 D for Periodic assessment. Conduct 15 marks assessment and enter marks in A, B, and C. ** Conduct Theory (100 Marks)(MCQ(20*1 Marks), SAQ(8*5), LAQ(4*10)) and Practical (100 Marks) Then convert to 30 marks.							

6 D - Evaluation Methods for Periodical Assessment

S. No	Evaluation Methods
1	Activities Indicated in Table 3 - Column G3 as per Indicated I, II or III term in column I3

Evaluation Methods in MSE

1. Practical / Clinical Performance
2. Viva Voce, MCQs, MEQ (Modified Essay Questions/Structured Questions)
3. Open Book Test (Problem Based)
4. Summary Writing (Research Papers/ Samhitas)
5. Class Presentations; Work Book Maintenance
6. Problem Based Assignment
7. Objective Structured Clinical Examination (OSCE), Objective Structured Practical Examination (OPSE), Mini Clinical Evaluation Exercise (Mini-CEX), Direct Observation of Procedures (DOP), Case Based Discussion (CBD)
8. Extra-curricular Activities, (Social Work, Public Awareness, Surveillance Activities, Sports or Other Activities which may be decided by the department).
9. Small Project etc.

6 E Question Paper Pattern

II PROFESSIONAL BAMS EXAMINATIONS
AyUG-SW
PAPER-1
Time: 3 Hours Maximum Marks: 100
INSTRUCTIONS: All questions compulsory

		Number of Questions	**Marks per question**	**Total Marks**
Q 1	MULTIPLE CHOICE QUESTIONS (MCQ)	20	1	20
Q 2	SHORT ANSWER QUESTIONS (SAQ)	8	5	40
Q 3	LONG ANSWER QUESTIONS (LAQ)	4	10	40
				100

Similar for Paper II

6 F Distribution of theory examination

Paper 1 Principles of Swasthavritta, Yoga and Naturopathy						
Sr. No	**A List of Topics**	**B Term**	**C Marks**	**MCQ (1 Mark)**	**SAQ (5 Marks)**	**LAQ (10 Marks)**
1	**Swastha and Swasthya**	1	6	Yes	Yes	No
2	**Healthy Life style -Dinacharya (Daily regimen)**	1	38	Yes	Yes	Yes
3	**Ratricharya**	1		Yes	Yes	No
4	**Ritucharya**	1		Yes	Yes	Yes
5	**Roganutpadaniya**	1	13	Yes	Yes	No
6	**Sadvritta**	1		Yes	Yes	No
7	**Ahara**	1	20	Yes	Yes	Yes
8	**Rasayana for Swastha**	1	5	Yes	Yes	No
9	**Yoga**	2	18	Yes	Yes	Yes
10	**Naturopathy**	2		Yes	Yes	No
Total Marks			**100**			

Paper 2 Public health						
Sr. No	**A List of Topics**	**B Term**	**C Marks**	**MCQ (1 Mark)**	**SAQ (5 Marks)**	**LAQ (10 Marks)**
11	**Janapadodhwamsa / Maraka Vyadhi**	2	10	Yes	Yes	Yes
12	**Environmental health**	2	16	Yes	Yes	Yes

13	**Disaster management**	2		Yes	Yes	No
14	**Occupational Health**	2	20	Yes	Yes	No
15	**School health services**	2		Yes	Yes	No
16	**Disinfection**	2		Yes	Yes	No
17	**Primary health care**	2	20	Yes	Yes	Yes
18	**Mother and Child health care**	2		Yes	Yes	No
19	**Family welfare programme**	2		Yes	Yes	No
20	**Preventive Geriatrics**	2		Yes	Yes	No
21	**World Health Organization and International health agencies**	2	19	Yes	Yes	No
22	**Vital Statistics**	2		Yes	Yes	No
23	**Health Administration**	2		Yes	Yes	No
24	**National Health Programmes**	2	15	Yes	No	Yes
25	**National Health Policy**	2		Yes	Yes	No
Total Marks			**100**			

6 G Blue print of paper I & II

Paper No:1		
Question No	**Type of Question**	**Question Paper Format**
Q1	**Multiple choice Questions** **20 Questions** **1 mark each** **All compulsory** **Must know part - 15 MCQ** **Desirable to know - 3 MCQ** **Nice to know part - 2 MCQ**	**1.** Swastha and Swasthya **2.** Healthy Life style -Dinacharya (Daily regimen) **3.** Ratricharya **4.** Ritucharya **5.** Roganutpadaniya **6.** Ahara **7.** Sadvritta **8.** Rasayana for Swastha **9.** Yoga **10.** Naturopathy **11.** Swastha and Swasthya **12.** Healthy Life style -Dinacharya (Daily regimen) **13.** Ritucharya **14.** Ratricharya **15.** Roganutpadaniya **16.** Sadvritta **17.** Ahara **18.** Rasayana for Swastha **19.** Yoga **20.** Naturopathy
Q2	**Short answer Questions** **Eight Questions** **5 Marks Each** **All compulsory** **Must know - 7 SAQ** **Desirable to know - 1 SAQ** **No questions on Nice to know**	**1.** Swastha and Swasthya **2.** Healthy Life style -Dinacharya (Daily regimen) **3.** Ratricharya **4.** Ritucharya **5.** Roganutpadaniya **6.** Sadvritta **7.** Naturopathy / Yoga **8.** Ahara
Q3	**Long answer Questions** **Four Questions** **10 marks each** **All compulsory** **All questions on must know. No Questions on Nice to know and Desirable**	**1.** Healthy Life style -Dinacharya (Daily regimen) **2.** Ritucharya **3.** Ahara **4.** Yoga

	to know	
Paper No:2		
Question No	**Type of Question**	**Question Paper Format**
Q1	**Multiple choice Questions** **20 Questions** **1 mark each** **All compulsory** **Must know part - 15 MCQ** **Desirable to know - 3 MCQ** **Nice to know part - 2 MCQ**	**1.** Janapadodhwamsa / Maraka Vyadhi **2.** Environmental health **3.** Disaster management **4.** Occupational Health **5.** School health services **6.** Disinfection **7.** Primary health care **8.** Mother and Child health care **9.** Family welfare programme **10.** Preventive Geriatrics **11.** World Health Organization and International health agencies **12.** Vital Statistics **13.** Health Administration **14.** National Health Policy **15.** National Health Programmes **16.** Janapadodhwamsa / Maraka Vyadhi **17.** Environmental health **18.** Occupational Health **19.** National Health Programmes **20.** Family welfare programme
Q2	**Short answer Questions** **Eight Questions** **5 Marks Each** **All compulsory** **Must know - 7 SAQ** **Desirable to know - 1 SAQ** **No questions on Nice to know**	**1.** Janapadodhwamsa / Maraka Vyadhi **2.** Disaster management **3.** Environmental health **4.** School health services **5.** Occupational Health **6.** Mother and Child health care **7.** Family welfare programme **8.** Preventive Geriatrics
Q3	**Long answer Questions** **Four Questions** **10 marks each** **All compulsory** **All questions on must know. No Questions on Nice to know and Desirable**	**1.** Janapadodhwamsa / Maraka Vyadhi **2.** Environmental health **3.** Primary health care **4.** National Health Programmes

	to know	

6 H Distribution of Practical Exam

S.No	Heads	Marks
1	Yoga - Demonstration of 4 Asanas and 1 Pranyama or Shatkarma proedure Any four asanas from following list for demonstration- Trikonasana, Ardhakatichakrasana, Gomukhasana, Bhadrasana, Pavanamuktasana, Sarvangasana, Bhujangasana and Shalabhasana. Each asana will carry 4 marks x 4 = 16 Procedure -1 mark, Final posture Holding time - 1, Breathing pattern-1 mark and On site viva - 1 mark Any one Pranayama among Nadishuddhi, Suryabhedana, Seetali, Seetkari , Bhramari or any one shatkarma among Neti and KapalabhatiEach pranayama or Shatkarma will carry 4 marks	20
2	Diet and Lifestyle advice case sheet A. Advise on Diet case - 25 Marks - Scenario will be given and asking student to prescribe diet as per the age, prakriti, occupation, agni bala etc,.. B. Advise on Lifestyle - 15 Marks - Scenario will be given and asking student advise lifestyle modifications such as Brahme muhurta uthishteth, Vyayama, Kavala- gandusha,Abhyanga, Udwartana ,Pratimarsha nasya etc,.. ,	40
3	Problem-based evaluation - Disinfection, Communicable diseases Environmental health, & Non- Communicable incuding deficiency diseases , A. Disinfection (identification, dose, suitsbility , dilution and contact period), Communicable diseases (giving scenarios and identifying diseases and mentioning preventive measures) and Environmental health (giving scenarios related environmental health issues and asking students to mention preventive and control measures) - 15 Marks B. Non- Communicable diseases (creating scenarios and asking to identify the diseases with preventive and control methods) and deficiency diseases (creating scenarios and asking students to indentify the deficiency conditions and asking the students to recommend the nutrients with nutrional profile etc,. - 15 Marks	30
4	Practical Records	10
5	Viva Viva on Project work (Activity based) - 10 Marks	60

Viva on I Paper - 25 Marks

A. Definition of Swastha , Swasthya, Swasthavritta and Health, dimentions of health, objective and subjective components of well-being- 2Mark

B. Benefits of Ushajala pana, Kavala , Gandusha, Dantadhavana, Anjana, Abhyanga,Udvartana, Vyayama, Snana and Tambula - 4 Mark

C. Rarti bhojana, Definition of Nidra , Types of nidra, Ahita nidra, definitions of sleep disorders , Definitions of Brahmacharya and Abrahmacharya and Adanakala and Visarga kala ritus, Doshavastha ,Balavastha,Agniavastha of different ritus , Definition of Ritusandhi, Yamadamshtra - 2 Marks

D. Adharaneeya vegas , Dharaneeya vega , definition of sadvritta and Acararasayana - 2 Marks

E. Importance of Ahara, classification of foods, Aharasevana kala, Ashta ahara vidhivisesha ayatana, Dwadasaha asana pravicarana with slokas , listing of nityasevana ahara dravya(Preferebly sloka), meaning of Pathya , Samashana, Adhyashana, Vishamasana. Sources and deficiency diseases of nutrients, Pastuerization of milk and its methods, meaning of different diet patterns, definition of nutrogenomics, nutracueticals, nutrigenetics and viridhha ahara . Definition, benefits and types of rasayana and definition of anti-oxidants with examples- 10 Marks

F. Definitions of Yoga , Meaning and types of Yama , Niyama, Asana,Pranayama, Pratyahara, Dharana, Dhyana,Samadhi (slokas mandatory), listing of shatkarma and indications of shatkarma (sloka mandatory), types of Bamdha, names of Shatchakra, diferences between Sushumna, Pingala and Ida nadi, definition of Moksha, Muktatma lakshana , Moksha upaya, , Basic principles of Naturopathy, Types of Fasting, Hydrotherapy and Massage - 5

Paper II - 25 Marks

	A. Meaning and causes of Janapadodhwamsa, Definitions of terms related to Epidemiolgy and infectious diseases, Dynamics of disease tranmission, Immunizing agents and Immunization schedule. Definition of vyadhikshamatva, Causative organisms and preventive measures of Communicable diseases -5 Marks B. Composition of Air, Definition of Comfort zone, Ventilation and its types, Definition of safe and wholesome water, Sources and types ofWater , Purification methods of water as per Ayurveda & Contemporary medicine, Definition of different types of waste, Definition of disaster and types of disasters- 5Marks C. Definition of occupational health, listing out occupational hazards and diseases. Est act & Factories act, Health problems of school children, definition of different terms related to disinfection, types and agents of disinfection - 5 Marks D. Definition, principles and elements of Primary health care, population coverage , functions and staff pattern at Sub-centre, Primary health centre and Community health centre, Objectives, problems and indicators of MCH, Definitions of demography, familiy planning ,eligible couple and target couple and methods of family palnning - 5Marks E . Definition of Geriatrics,Problems of aged, Definition,structure and regions of WHO, Year of eshtablishment , head quarters and main functions of international health agencies, Definition and sorces of vital statistics, organizational structure of health administartion , Year of eshtablishment and main objectives of different national health programmes- 5 Marks	
6	Elective (Set SC)	10
7	Interna Assessment -	30
Total Marks		**200**

References Books/ Resources

S.No	Book	Resources
1	Relevant portions of Charaka, Sushruta, Vagbhata, Sarngadhara, Bhavaprakasha, Yogaratnakara, Madhavanidana and Bhelasamhita.-relevantSamhithas	Print /online samhithas
2	SwasthavrittaSamucchaya	Vaidya . Rajeswaradutta shastri , Chaukhambha Viswabharathi, Varanasi, India
3	Swasthavrittavigyan	Dr.Ramaharsha singh , Chaukhambha Publishing house, Varanasi, India
4	Yoga sutras of Patanjali	BKS Iyengar , Published by Harper collins , Publishers India , Newdelhi
5	Hathayogapradipika	Swami Muktibodananda , Published by Yoga publications trust, Ganga darshan, Munger, Bihar, India
6	Gheranda samhitha	Edited with Sweta , English commentary of Mrs.Shweta Bhat and Edited by Goswami Prahlad Giri, Published by Krishnadas Academy , Varanasi- 221001
7	Yoga deepika	BKS Iyengar , Published by Harper collins , Publishers India , Newdelhi
8	Light on Yoga	BKS Iyengar , Published by Harper collins , Publishers India , Newdelhi
9	Light on Pranayama -	BKS Iyengar , Published by Harper collins , Publishers India , Newdelhi
10	The Foundations of Contemporary Yoga	Professor RH Singh , Published by Chaukhambha Sanskrit Pratishtan, Newdelhi ..
11	Park's Text book of Preventive and Social Medicine	K.Park , Published by M/s BANARASIDAS BHANOT, LABALPUR, INDIA
12	Text book of Preventive and Social Medicine	MC Gupta & BK Mahajan, Published by JAYPEE BROTHERS , Medical publishers , Newdelhi
13	Dr. Reddy’s comprehensive guide to Swasthavritta	Dr.P.Sudhakar Reddy , Published by Chaukhambha Sanskrit Pratishtan, New Delhii
14	Indian food composition Tables	T Longvah , Published by National institute of Nutrition, Hyderabad
15	Food and nutrition	Swaminathan , Published by Banglore Printing & Publishing Co.Ltd, Banglore
16	Swasthavrittasudha	Vd.Kashinath Samagandi, Published byb Ayurveda Sanskrit hindi pustak bhandar , Jaipur .

17	S.Kashi's Text book of Svasthavrtttamritam	Vd.Kashinath Samagandi, Published by Ayurved sanskrit hindi pustak bhandar, Jaipur
18	Text Book of Swasthavrittam	Dr. Mangala Gouri V Rao, Chaukhambha Orientalia, Varanasi, India (2022)
19	Text book on Swasthavritta	Dr.P. Sudhakar Reddy , Dr.Beena MDPublishers : Chaukhambha Orientalia, Varanasi, India Year : 2022
20	Bhojanakutuhalam	Raghunatha suri,Edited by Scholars of the Centre for Theoretical foundations (CTF), Institute of Ayurveda and Integrative Medicine I-AIM, FRLHT , Bengaluru- 560064
21	Kshemakutuhalam	Compiled by Kshema sharma , Published By Indian institute of Ayurveda & Integrative medicine , Bengaluru-560064
22	Recent trends in Community Medicine	Suryakantha AH, Published by JAPEEPY BROTHERS
23	The Essentials of Natur cure	Dr.Mangala Gouri.V. Rao, Published by Chaukhambha Orientalia, Varanasi
24	WHO	https://www.who.int
25	Food laws	https://www.corpseed.com/knowledge-centre/food-laws-and-regulations-in-india
26	Food acts	: https://fssai.gov.in/cms/food-safety-and-standards-act-2006.php
27	National health programs	https://ncdc.mohfw.gov.in/index4.php?lang=1&level=0&linkid=55&lid=138
28	Family welfare programme	https://ncdc.mohfw.gov.in/index4.php?lang=1&level=0&linkid=55&lid
29	Health & Family welfare	https://www.india.gov.in/topics/health-family-welfare
30	Census of India	: https://censusindia.gov.in
31	Hatha yoga Pradeepika	Pandith. Hariprasad Tri[athi, Published by Chaukhambha Krishna das Academy, Varanasi , India
32	A Complete Handbook of Nature cure	H.K.BAKHRU , JAICO Publishing house, Bombay
33	Yoga & Ayurveda	Satyendra prasad MIshra , Published by Chaukhambha Sanskrit Samsthan , Varanasi
34	The Yoga Science	Dr. Ravi R Javalgekar , Published by Chaukhambha Sanskrit Sansthan , Varanasi, India
35	Concept of Ayurveda for perfect Health & Longevity	Vaidya H.S. Kasture , Published by Shree baidyanath Ayurveda Bhavan Private LTD, Nagpure , India

36	Essentials of Community medicine practicals	DK Mahabalaraju, Published by JAYPEE BROTHERS Medical publishers , Newdelhi
37	Positive health through Ayurveda	Dr.LP Gupta & Dr.LV Guru, Published by Chaukhambha sanskrit Pratishtana , Newdelhi
38	Food Science	B Srilakshmi , Published by NEW AGE INTERNATIONAL (P)LIMITED, PUBLISHERS , NEWDELHI
39	Apollo Clinical Nutrition- Handbook	Anita Jatan, Daphnee DK, Haritha Shyam, Priyanka Rohatgi and Kajal Pandya Yeptho- Published by JAYPEE BROTHERS MEDICAL PUBLISHERS PVT LTD, NEWDELHI

Assessment

S.No	Short form	Discription
1	T-EMI	Theory extended matching item
2	T- EW	Theory Essay writing
3	T- MEQs	Theory MEQs
4	T-CRQs	Theory CRQs
5	T-CS	Theory case study
6	T-OBT	Theory open book test
7	P-VIVA	Practical Viva
8	P-REC	Practical Recitation
9	P-EXAM	Practical exam
10	PRN	Presentation
11	P-PRF	Practical Performance
12	P-SUR	Practical Survey
13	P-EN	Practical enact
14	P-RP	Practical Role play
15	P-MOD	Practical Model
16	P-POS	Practical Poster
17	P-CASE	Practical Case taking
18	P-ID	Practical identification
19	P-PS	Practical Problem solving
20	QZ	Quiz
21	PUZ	Puzzles
22	CL-PR	Class Presentation,
23	DEB	Debate
24	WP	Word puzzle
25	O-QZ	Online quiz

26	O-GAME	Online game-based assessment
27	M-MOD	Making of Model
28	M-CHT	Making of Charts
29	M-POS	Making of Posters
30	C-INT	Conducting interview
31	INT	Interactions
32	CR-RED	Critical reading papers
33	CR-W	Creativity Writing
34	C-VC	Clinical video cases,
35	SP	Simulated patients
36	PM	Patient management problems
37	CHK	Checklists
38	OSCE	OSCE
39	OSPE	OSPE,
40	Mini-CEX	Mini-CEX
41	DOPS	DOPS
42	CWS	CWS
43	RS	Rating scales
44	RK	Record keeping
45	COM	Compilations
46	Portfolios	Portfolios
47	Log book	Log book
48	TR	Trainers report
49	SA	Self-assessment
50	PA	Peer assessment
51	360D	360-degree evaluation
52	TT-Theory	Theory
53	PP-Practical	Practical
54	VV-Viva	Viva

Domain

S.No	Short form	Discription
1	CK	Cognitive/Knowledge
2	CC	Cognitive/Comprehension
3	CAP	Cognitive/Application
4	CAN	Cognitive/Analysis
5	CS	Cognitive/Synthesis
6	CE	Cognitive/Evaluation
7	PSY-SET	Psychomotor/Set
8	PSY-GUD	Psychomotor/Guided response
9	PSY-MEC	Psychomotor/Mechanism
10	PSY-ADT	Psychomotor Adaptation
11	PSY-ORG	Psychomotor/Origination
12	AFT-REC	Affective/ Receiving
13	AFT-RES	Affective/Responding
14	AFT-VAL	Affective/Valuing
15	AFT-SET	Affective/Organization
16	AFT-CHR	Affective/ characterization

T L method

S.No	Short form	Discription
1	L	Lecture
2	L&PPT	Lecture with Power point presentation
3	L&GD	Lecture & Group Discussion
4	L_VC	Lecture with Video clips
5	DIS	Discussions
6	BS	Brainstorming
7	IBL	Inquiry-Based Learning
8	PBL	PBL
9	CBL	CBL
10	PrBL	Project-Based Learning
11	TBL	TBL
12	TPW	Team project work
13	FC	Flipped classroom
14	BL	Blended Learning
15	EDU	Edutainment
16	ML	Mobile learning
17	ECE	ECE
18	SIM	Simulation
19	RP	Role plays
20	SDL	Self-directed learning
21	PSM	Problem solving method
22	KL	Kinesthetic Learning
23	W	Workshops
24	GBL	Game-Based Learning
25	D-M	Demo on Model

26	LS	Library Session
27	PL	Peer learning
28	RLE	Real life experience
29	REC	Recitation
30	SY	Symposium
31	TUT	Tutorial
32	PER	Presentations
33	PT	Practical
34	XRay	X ray identification
35	CD	Case diagnosis
36	LRI	Lab report interpretation
37	DA	Drug analysis
38	D	Demonstration
39	D_BED	Demonstration bedside
40	D_L	Demonstration Lab
41	DG	Demonstration Garden
42	FV	Field visit
43	PRA	Practical

(Name of the College)

(Approved by –National Commission for Indian System of Medicines, New Delhi &

Name of the University)

Name of the department

Batch- _____

Certificate

This is to certify that, Mr. / Ms. _____, Enrollment Number- _____ has satisfactorily completed the course of Practicals in (Subject Name) prescribed by the (Name of University) as a part of the Second Professional B.A.M.S. Course.

Examination Seat No.: _____

Date of Examination- _____

Sign. Of Internal Examiner-_____

Sign. Of External Examiner-_____

Sign. of Teacher Sign. of H.O.D.

Paper – I

Contents

Name of the chapter	Name of the practical	Page no.
Dinacharya		
	Collect and Compare different Dantadhawana Churnas/ Tooth pastes available in the market and choose/ advise the appropriate one based on the need.	
	Collect and compare different Jiwha Nirlekhana Yantra (Tongue cleaners) available in the local area/ market and choose/advise the appropriate one for swastha	
	Collect different dravya/kashaya/mouthwashes available in the market for kavala and gandusha; demonstrate the procedure of kavala and gandusha with appropriate liquids /dravyas for swastha	
	Collect different types of Anjana (Collyriums) available in the market, Demonstrate Anjana procedure as per local traditions and advise different types of Anjana for swastha	
	Demonstrate Pratimarsha Nasya with Anutaila/ Sesame oil and prescribe the appropriate taila for Pratimarsha Nasya for swastha.	
	Demonstrate Prayogika Dhoomapana and advise prayogika dhoomapana dravya for swastha	
	Demonstrate the procedure of Abhyanga techniques for full body abhyanga, padabhyanga and shiroabhyanga and prescribe suitable Taila for Abhyana for Swastha.	
	Demonstrate the procedure of Udwartana techniques and prescribe suitable dravya for Udwartana for Swastha	
	Prescribe appropriate dinacharya module regarding ahara and vihara as per age and occupation /activity.	
	Advise /counsel people regarding healthy lifestyle based on the Ayurvedic principles (one student should counsel at least five persons and should be documented).	
Ahara		
	Collection, compilation and documentation of region wise different varieties of Ahara Varga (Millets, cereals, pulses, vegetables, varieties of milk/oil/honey/ available in the market).	
	Preparation of the recipes as per SOPs and demonstrating their therapeutic indication and nutritive values. a. Manda b. Peya c. Vilepi d.Yavagu e.Odana f. Krishara g.Yusha h.Takra	
	Prepare/Prescribe the diet and lifestyle regimen (pathya-apathya) with reference to Ahara and Vihara for each ritu.	
	Conduct diet counselling according to prakriti, agni, sara, satva, age, sex, occupation/ activity, and prevailing season based on the regional food habits with serving sizes with different food exchange/options for 5 persons.	
Yoga		
	Introduction: It should contain definition of Yoga and importance of Yoga in maintenance of health	
	General rules to be followed while doing Yoga Practice.	

	List Loosening Exercises used in common Yoga Practice	
	Two Standing Asanas	
	Five Sitting Asanas	
	Two Supine asanas	
	Two Prone asanas	
	Shtakrama	
	Pranayama	
	IDY Protocol	

Dincharya

1. Collect and Compare different Dantadhawana Churnas/ Tooth pastes available in the market and choose/ advise the appropriate one based on the need.

Dravya (Tooth powder/paste/ local preparation	Composition	Availability	Picture

Most appropriate Dravya for Dantdhavan –

2. Collect and Compare different Jiwha Nirlekhana Yantra (Tongue cleaners) available in the local area/ market and choose/advise the appropriate one for swastha

Name of the tongue cleaner	Type of material used	Picture

Appropriate one for Swastha –

3.Collect different dravya/kashaya/mouthwashes available in the market for kavala and gandusha; demonstrate the procedure of kavala and gandusha with appropriate liquids /dravyas for swastha

Name of the product mouth wash/gargle available in the market	Composition	Picture

a. Demonstration of Kavala

Material required:

Procedure of Kavala (Paste the own picture)

Description of different dravyas used for kavala with its

action as per classics

b. Demonstration of Gandusha

Materials required:

Procedure of Gandusha (Paste the own picture)

Description of different dravyas used for gandusha with its action as per

4.Collect different types of Anjana (Collyriums) available in the market, Demonstrate Anjana procedure as per local traditions and advise different types of Anjana for swastha.

Types of Anjana available in market	Medicinal purpose / Cosmetic purpose	Benefits

Demonstration of Anjana (SOP-Standard Operating Procedure)

Materials required:

Procedure (Paste with own picture):

Swastha Hitkara Anjana in daily regime –

Occupations/ conditions indicated for Anjana

5. Demonstrate Pratimarsha Nasya with Anutaila and prescribe the appropriate taila for Pratimarsha Nasya for swastha.

Materials required

Procedure of Pratimarsha nasya (Paste own picture)

Mention Dravyas used for pratimarsha nasya

Benefits of Pratimarsha Nasya-

Occupations/ conditions indicated for Pratimarsha nasya-

6. Demonstrate Prayogika Dhoomapana and advise prayogika dhoomapana dravya for swastha.

Materials required for Prayigika dhumapana

Procedure of Prayogika dhumapana(Paste own picture)

Benefits

Suggest materials used for Prayogika dhumapana

7. Demonstrate the procedure of Abhyanga techniques self - padabhyanga , shiroabhyanga and Karnapurana .

Materials required:

Procedure of Abhyanaga

Benefits of Sarvang Abhyanga, Shiro Abhyanga, Padabhyanga and Karnapurana

Occupations/ conditions where abhyanga is essential-

8. Demonstrate the procedure of Udwartana techniques and prescribe suitable dravya for Udwartana for Swastha.

Materials required

Procedure of Udvartana

Different types of dravyas used in Udwartana/Utsadana with their benefits

9. Prescribe appropriate dinacharya module regarding ahara and vihara as per age and occupation /activity for minimum 2 persons

Name: Age: Sex:

Occupation: Daily travelling hours

Mode of travelling:

Time of sleep:

Time of awakening -

Total hours of night sleep:

Quality of Sleep: Sound/ disturbed/ late sleep

Day sleeping: Yes/No

Prakriti –

Kshudha – Yes /No

Consumption of food – Due to hunger / As per time

Asatmya of specific food –

Food Timings –

Meals - →	Breakfast -	Lunch -	Evening food -	Dinner -
Timings ➡				
Foods often consumed -				

Consumption of –

	Present	Absent
Abhishyandi (daily curd / fermented etc.)		
Paryushit (stale food)		
Adhyashan		
Vishamashan		
Samashan		
Anashan		
Viruddhashan		

Any other specification regarding food habits –

Prescription/ Advice:

1. Ahara-

2. Vihara:
   i) Dinacharya measures:

   ii) Nidra:

   iii) Occupation/lifestyle advice:

10. Advise /counsel people regarding healthy lifestyle based on the Ayurvedic principles (one student should counsel at least five persons and should be documented).

Date:

Name: Age: Gender: M/F Occupation:
Address:

Chief Complaints (If Any)

History of present illness

History of Previous Illness:

Family/ heredity illness -

General Examination:

Wt. -_____kg. Ht._____cm. BMI-

Samhanan- Hina/ Madhya/ uttam Sara: --

Agni: Manda/ tikshna/ vishama Koshtha: Mrudu/ Madhya/ Krura ú

Ashtavidha Parikshana

Nadi: B.P.-

Mutra pravritti- - Mala pravritti:

Jivha: Sama/ Niram Shabda-

Sparsha: Ushna/ shita -

Druk: Akruti: Sthula/Krusha/ Madhyam

Menstruation: Regular/Irregular, after every_____ days,

Prakruti Assessment:

Vata/Pitta/Kapha/vata-pitta/ pitta vata/ vata-kapha/kapha-vata/ pitta kapha/ kapha-

Information Regarding Dinacharya:

Time of sleep – Time of awakening -

Total hours of night sleep-

Quality of Sleep: Sound/ disturbed/ late sleep/ if disturbed cannot sleep again

Day sleeping: Yes/No

Vyayama -Exercise: Yes/No Type:_____and __ hours /Minutes Daily -

Yogasana: Yes/No, Pranayam: Yes/No

Type of Asanas Practicing: _____hours daily

Food: Vegetarian/ Non-Vegetarian

Tea/ Cofee /Milk: Yes/No, Time of consumption:

Kshudha: Yes/No /Sometimes Yes

Trishna (Thirst): Yes/No/ very less / excess

Food Timings –

Meals - →	Breakfast -	Lunch -	Evening snacks -	Dinner -
Timings →				
Foods often consumed -				

Consumption of –

	Yes	No
Abhishyandi (daily curd / fermented etc.)		
Paryushit (stale food)		
Adhyashan		
Vishamashan		
Samashan		
Anashan		
Viruddhashan		

Any other specification regarding food habits –

Water Intake: After getting up from sleep/ During meals/ after meals/ at bed time

Total consumption in a day:_____litres a day

Fasting: Yes/No,_____times a month, Food Items -

Addictions: Tobacco smoking/Tobacco chewing/ alcohol/ any other/

Screen Time:_____hours daily, Screen- TV/ mobile/ tab/laptop

Vihara- Type of occupation: Intellectual/ Physical work

Natural Urges (Vega): Suppression: Yes/No, if Yes which vegas are suppressed: symptoms, if any after suppression of the vega:

Mental Status (Mana swasthya)**:** Stress- Yes/No, if Yes- family/ work/ any other stress
Dharaniya vega udirana: Yes/No, if Yes- kama/krodha/ moha/ lobha/ dvesha/

Any medication taking currently: Yes/No, if Yes, name of the medicines:

Advice:
Ahara (Diet): Pathya/ Apathya (Mention food items, do's and don'ts) -
Vihara: Vyayama/ Yoga (Specify-) –
Regarding Nidra:
Dinacharya Measure: Anjana/Nasya/ Dhumapana/ Kavala/gandusha/ Abhyanga/ Vyayama/ Udvartana/ any other

For Mental Health: Pranayam/ Stress counselling/ any therapy to be done: Yes/No, If Yes- name of therapy: Shirodhara, Shiropichu, any other

Ritu Shodhana: Yes/no, If Yes- Vamana/Virechana/ Basti/ Raktamokshana/ Shirovirechana

Shamana: Pacahana/ Dipana/ Vyayama/ Atap sevana/ Anila sevana/ Upawasa (Kshudha rodha)/ Trishna rodha

Rasayana – Medhya/ Suvarna prashana/ vatatapika

Seasonal Advice:

Name of the Student Signature of the student

Signature of the Faulty

AHARA

1. **Collection, compilation and documentation of region wise different varieties of Ahara Varga (Millets, cereals, pulses, vegetables, varieties of milk/oil/honey/ available in the market). (Minimum of 20 food stuffs can be written)**

SL NO	PARTICULARS	DETAILS
1	Name of the Ahara Dravya (food stuff)	
2	Classification as per Ayurveda and contemporary science	
3	Brief description about the food stuff	
4	Ayurveda Guna Karma analysis	
5	Nutritional analysis	
6	Currently practiced preparations	
7	Other observations (usage, quantity of consumption etc)	
11	Photograph of the food stuff	Attach a snap or mention Google drive link.

2. Preparation of the recipes as per SOPs and demonstrating their therapeutic indication and nutritive values. a. Manda b. Peya c. Vilepi d.Yavagu e.Odana f. Krishara g.Yusha h.Takra (Minimum of 10 preparations)

SL NO	PARTICULARS	DETAILS
1	Name of the recipe	
2	Brief description about the food stuff	
3	Ingredients required	
4	SOP of preparation	
5	Ayurveda Guna Karma analysis	
6	Nutritional analysis	
7	Therapeutic indications and dosage	
8	Other observations (usage, quantity of consumption etc)	
9	Photograph of the food stuff	Attach a snap or mention Google drive link of preparation video.

3. **Diet counselling** (for minimum of 10 persons)

Name of the patient:

Age/Sex:

OPD/IPD No:

Referring consultant:

Diagnosis:

Date:

Occupation

Anthropometric measurements:

Ht: Weight:
BMI: IBW

Prakriti: VP / PK / KV

Diet History:

Particulars				
Type of Diet	Vegetarian	Ova –vegetarian	Mixed	Others
Habituated Food items Ex: Pickle/ papad/chats/outside foods/ beverages etc.	Daily	Weekly	Fortnightly	Monthly
Timing of Consumption	Regular	Irregular	Occasionally Irregular	
Practice of viruddha ahara	Regular practice	Occasional practice		
Nutritional Evaluation	High Calorie Diet	Low Protein Diet	High protein diet	Bland diet
Nature of Food consumed	Vataja ahara	Pittaja ahara	Kaphaja ahara	Combined

Therapeutic Diet advices:

Particulars				
Nature of Diet Advised				
Specific Cereals	Rice/ Boiled rice/Jowar/Wheat/ / Others -			
Specific millets	Ragi/ Navane/ Saame/ Sajje/ harka/ Koral/ oodalu/ Baragu			
Specific Pulses	Green Gram/ Toor dal/ Black gram/lentils Horsegram/ Soyabean/others			
Specific oil	Olive/ Sunflower/ Safflower/ mustard / sesame/ groundnut			
Specific Vegetable, Roots and tubers	All leafy vegetables In specific:			
Specific fruits	All fruits			
Milk and its bi-products	Skimmed milk/ Buttermilk/ Curds/ Cheese/ Butter/ ghee/paneer			
Non-veg	Egg/ Fish/ Chicken/ Red meat/ prawn/ pork/ beef			

Dietetic advice

	Particulars	Modification Advises
1	Diet pattern – vegetarian /nonveg/vegan/ovovegetarian	
2	Timings of food intake - Morning drink/Breakfast/midday snacking/lunch/high tea/dinner	
3	Food quantity and quality analysis	
4	Nutritional analysis of food in all serving times	

Formulated diet plan

	Timing +/_ 15 min	Food items with serving size	Therapeutic peya advised
Morning drink	6am		
Breakfast	8.30am		
Lunch	1.30pm		
Evening high tea time	5pm		
Dinner	8pm		

4. Lifestyle management' counselling and Therapeutic Diet sheet (10 patients)

Name of the patient: Diet pattern:

Age/Sex: Date:

OPD/IPD No: Occupation:

Referring consultant:

Chief complaints for which patient got admitted:

General examination findings:

Height:

Weight:

BMI status:

BP:

HR:

Other systemic examination findings:

Whether K/C/O DM, HTN, allergic to any drugs? On regular medication? If Yes, Details

Diagnosis:

Treatment details in brief:

On-going procedure:

1. **Life style Observations**

		Observations	**Specific observations if any**
1	Physical health		
2	Psychological health		
3	Family Health		
4	Occupational health		
5	Financial health		
6	Social health		

2. **Daily routine observations:**

	Particulars	**Observations**
1	Waking up time	
2	Oral hygienic practices	
3	Physical exercises/Yoga practices/brisk	

	walking/jogging/swimming/meditation/others	
4	Working pattern-official/sedentary/laborious/stressful	
5	Evening routine	
6	Habits	
7	Sleeping time	
8	Duration of sleep and nature of sleep	

3. Dietary Observations

	Particulars	
1	Diet pattern – vegetarian /nonveg/vegan/ovovegetarian	
2	Timings of food intake - Morning drink/Breakfast/mid day snacking/lunch/high tea/dinner	
3	Food quantity and quality analysis	
4	Nutritional analysis of food in all serving times	

Advices:

1. **Life style modifications:**

		Modifications advised
1	Physical health	
2	Psychological health	
3	Family Health	
4	Occupational health	1. Fix working hours 2. Schedule the work 3. Mark priority to the assigned work and work accordingly 4. Cooperation and coordination with workmates 5. Patience while completing the tasks
5	Financial health	
6	Social health	

2. Daily routine practices advise:

	Particulars	**Modification advises**
1	Waking up time	
2	Oral hygienic practices	
3	Physical exercises/Yoga practices/brisk walking/jogging/swimming/meditation/others	
4	Working pattern-official/sedentary/laborious/stressful	
5	Evening routine	
6	Habits	
7	Sleeping time	
8	Duration of sleep and nature of sleep	

3. Dietetic advice

	Particulars	**Modification Advises**
1	Diet pattern – vegetarian /nonveg/vegan/ovovegetarian	

2	Timings of food intake - Morning drink/Breakfast/midday snacking/lunch/high tea/dinner	
3	Food quantity and quality analysis	
4	Nutritional analysis of food in all serving times	

Formulated diet plan

	Timing +/_ 15 min	Food items with serving size	Other additional information
Morning drink	6am		
Breakfast	8.30am		
Lunch	1.30pm		
Evening high tea time	5pm		
Dinner	8pm		

YOGA

General rules to be followed while doing Yoga Practice.

List Loosening Exercises used in common Yoga Practice

Asanas

Standing Asana (Any two asanas among the theory syllabus)

Name of the Asana:

Procedure: (Paste own picture)

Sthiti :

Step by step description

Benefits and Indications

Contraindications

SITTING POSTURES (any five asanas among the theory syllabus)

Name of the Asana:

Procedure: (Paste own picture)

Sthiti :

Step by step description

Benefits and Indications

Contraindications

LYING SUPINE POSTURES (any two asanas among the theory syllabus)

Name of the Asana:

Procedure: (Paste own picture)

Sthiti :

Step by step description

Benefits and Indications

Contraindications

LYING PRONE POSTURES (any two asanas among the theory syllabus)

Name of the Asana:

Procedure: (Paste own picture)

Sthiti :

Step by step description

Benefits and Indications

Contraindications

SHAT KARMAS

1. Jalaneti

Materials required

Procedure (Paste own picture)

Benefits and Indications

Contraindications

2. Kapalabhati

. Materials required

Procedure (Paste own picture)

Benefits and Indications

Contraindications

3. Trataka

Materials required

Procedure (Paste own picture)

Benefits and Indications

Contraindications

PRANAYAMA

1. Anuloma – Viloma Pranayama.

Procedure (with own picture)

Benefits & Indications

Contraindications (If any)

2. Nadishuddhi Pranayama.

Procedure (with own picture)

Benefits & Indications

Contraindications (If any)

3. Suryabhedana Pranayama

Procedure (with own picture)

Benefits & Indications

Contraindications (If any)

4. Ujjayi Pranayama.

Procedure (with own picture)

Benefits & Indications

Contraindications (If any)

5. Shitali Pranayama.

Procedure (with own picture)

Benefits & Indications

Contraindications (If any)

6. Sheetkari Pranayama.

   Procedure (with own picture)

   Benefits & Indications

   Contraindications (If any)

7. Bhastrika Pranayama.

Procedure (with own picture)

Benefits & Indications

Contraindications (If any)

8. Bhramari Pranayama.

Procedure (with own picture)

Benefits & Indications

Contraindications (If any)

Common Yoga Protocol of IDY (International Day of Yoga)

Paper – II

Contents

Name of the chapter	Name of the practical	Page no.
Disinfectants	Identify and demonstrate the suitability, dose, dilution, and contact period of the following disinfectants: Bleaching powder, Dettol, Lysol, Savlon. Observe the procedure of fumigation of the operation theatre. Write the mode of working and uses of an autoclave.	
IEC	Demonstrate communication methods for health education. Demonstrate/ Present different health education materials (dinacharya practices, sadvritta practices, family planning methods, breastfeeding techniques, etc.) to non-teaching staff of college and hospital/ patients.	
Community Survey	Conduct minimum 05 Family surveys using a structured questionnaire in specific rural populations and report the survey findings and discuss possible solutions to the family. Conduct minimum 05 family surveys using a structured questionnaire in specific urban populations and report the survey findings and discuss possible solutions to the family.	
Local health educational visits	Report the functioning of milk dairies such as methods of processing and preservation of milk, testing of milk before and after pasteurization, and the standards of milk & milk products. Report the various process involved in water purification plant. Report the processes involved in modern sewage treatment plant.	

	Report the various measures adopted for the prevention and control of occupational diseases in any industry. Report the food safety standards and methods of food processing techniques adopted in any food industry. Report the various treatment modalities adopted in Naturopathy and Yoga canters.	
Visit to National health programs and Ayurveda center	Report the functioning of a Primary health centre/Community health centre/Rural hospital/District hospital with regards to the implementation of different National Health Programmes viz. infectious disease control, immunization, ANC, Family planning etc. Report the structure and functioning of a Ayurveda Dispensary/ Taluk Hospital /District Hospital available in the district.	
Monitoring of Health and hygiene	Conduct periodic check-ups , collect demographic profile and clinical examination of allotted 2 subjects/Individuals (one from the community and one from employees of the college/hospital) (Assess Prakriti, Satva, Sara, etc.)for their health status / occupational health status and if any treatment is prescribed then coordinate the treatment under the overall guidance of the teacher/Mentor. Counsel and advice the allotted 2 subjects a healthy regime prescription and analyse their health status after following the healthy regime under the overall guidance of the teacher/mentor. Document the maintenance of water sanitation, waste disposal including biomedical waste in the hospital.	

DISINFECTANTS

1. Identify and demonstrate the suitability, dose, dilution, and contact period of the following disinfectants:

a. Bleaching powder
b. Dettol
c. Lysol
d. Savlon.

2. Observe the procedure of fumigation of the operation theatre

Date:

Name of the OT:

Name of the material used for fumigation:

Procedure of fumigation:

Contact period:

3. Write the mode of working and uses of an autoclave.

Date:

Name of the autoclave:

Working principle:

Uses:

2. IEC

Components of IEC materials shall be of following topics

1. DINACAHRYA PRACTICES

2. SADVRITTA PRACTICES

3. FAMILY PLANNING METHOD

4. BREAST FEEDING TECHNIQUES

5. Other components which the faculty/students feel to convince to the local areas and it shall be need based.

Target Population: COMMUNITY

Note: Minimum 3 IEC materials can be prepared and documented

Format for IEC material preparation and presentation

mSL NO	**PERTICULAR**	**DETAILS**
1	Name of the IEC to be prepared	
2	Type of IEC prepared	Chart/model/PPT/Video/GIF/others
3	Brief description about the material	
4	Objectives	1. 2. 3.

5	Specific points to be conveyed	1. 2. 3.
6	Duration of the presentation	
7	Target population	
8	Pretest questions to be asked	

9	Post test questions to be asked	
10	Overall impact on population	
11	Photograph of the event	Attach a snap or mention Google drive link.

4. Community Survey (5 rural & 5 urban population)

General information

Name of the village/ Ward: Sub centre:

PHC:

Family studied:

Head of the family:

Address:

Habituated since.....years

If migrated, details. Duration....., previous place..... , reason of migration:

Family Profile

Family structure:

Age	Males	Females	Total	
Infants				
1-5 years				
6-15 years				
16-64 years				
Above 65 years				

FAMILY SIZE:

Total no of persons in the family:

Demographic family size:

Number of children women has given birth at a point of time:

Dependency status: total dependency:

Family type:

Per capita monthly income:

Marital status:

Physiological conditions:

Medical conditions:

Social conditions:

SOCIO -ECONOMICAL STATUS ASSESSMENT

Social status of the family: religion: cast:

Language known:

Literacy status:

Head of the family:

Literacy rate of the family:

Occupational status of the family:

Economic status:

Cultural Practices

Family cultural practices:

Practices among women and children:

LIVING ENVIRONMENT

Physical environment:

House:

Type:

Construction:

Kitchen:

Water supply:

Waste disposal:

Dietary assessment

Food practices:

Family Health Profile

Examine and interact all persons present during your visit, by giving priority to vulnerable individuals. Briefly summarise the findings

Pregnant women not registered:

Family planning non-acceptors:

Seriously/ chronically ill patients:

Low birthweight child:

Severely malnourished child:

Unimmunised child:

Maternal, neonatal or child death:

Severe anaemia:

Pneumonia, diarrhoea, vitamin A deficiency in child:

Availability and utilisation of Health Services

Curative:

Allopathy

Ayurveda

Homeopathy

Others (Yoga,Naturopathy, Siddha,Sowa-rigpa)-

Preventive:

Immunisation

Prophylactic or Promotive:

- Brahme muhurta uthishthet
- Usha jalapana
- Dantadhavana
- Jihwanirlekana
- Gandusha / Kavala
- Yoga practice or Physical Exercise
- Rasayana sevana
- Abhyanga
- Snana
- Bhojana
- Tambula sevana
- Sandhya kala vidhi
- Ratriaharasevana
- Ratrinidra
- Type of Dead body disposal:

Visit to Observe National Health Programs & Health Centre (Minimum of 5)

Date of Visit:

Name of the Primary health centre/Community health centre/Rural hospital/District hospital:

Medical officer in charge:

List of available staff:

List of the National Health Programmes implemented through this centre:

Programme wise Details:

1. Name of NHP:

- Services rendered:

- Number of beneficiaries in last calendar year

Report the structure and functioning of Ayurveda Dispensary/ Taluk Hospital /District Hospital available in the district

Date of Visit:

Name of the Primary health centre/Community health centre/Rural hospital/District hospital:

Medical officer in charge:

List of available staff:

Infrastructure Details:

Total Area:

Number of Blocks:

List of sections/departments available:

List of services rendered:

Average OPD patients in the last calendar year:

Average IPD patients in the last calendar year:

List of medicines available:

Other details:

Signature of student Signature of faculty

Educational Visits Report (Minimum of 6)

1. Visit No:

2. Date of Visit:

3. Place of the visit:

4. Purpose of the visit:

5. Details about the Visit: (Attach geo-tagged photo and link)

Case Sheet of Monitoring of Health and Hygiene (minimum 2 individuals)

Name of the individual: CR Number:

Age: Gender: Address:

Category: Community/ Employee of the college or hospital

Occupation/Designation:

Date of first check-up: Current Ritu:

Marital status: Income group: LIG/MIG/HIG

Personal Habits/ addictions:

Personal Hygiene:

Examination:

Prakriti (to be assessed using App of NCISM):

Maanas Prakriti:

Satva: Pravara/ Madhyama/ Avara

Periodic check-up:

Sr. No.	**Examination**	**First check-up**	**Tri-monthly check-up**	**Six-monthly check up**
1.	Sara			
2.	Nadi			
3.	Mutra			
4.	Mala			
5.	Jihva			
6.	Shabda			
7.	Sparsha			
8.	Druk			
9.	Akruti			

10.	Agni			
11.	Weight			
12.	Height			
13.	Body Mass Index			
14.	Temperature			
	Srotas Parikshana: Respiratory Rate			
15.	Heart Rate			
16.	Blood Pressure			
17.	Any other Symptoms			
18.	Difficulties faced at workplace (if any)			
19.	Laboratory Investigations (if any)			

Periodic Treatment Follow up (if any):

Treatment advised after first check-up	Follow up at tri-monthly check-up	Follow up at Six-monthly check-up

Counseling and Pathyapathya Advice:

Health Status on First Check up	**Advice on First Check up**			**Health Status on Tri-monthly Check-up**	**Advice on Tri-monthly Check- up**			**Health Status on Six-monthly Check-up**
	Upakrama	Pathya (Do's)	Apathya Don'ts		Upakrama	Pathya (Do's)	Apathya Don'ts	
	Ahara				Ahara			

	Vihara (including dinacharya upakrama)				Vihara			
	Yoga				Yoga			
	Nisargopachara				Nisargopachara			

Signature of student signature of faculty

Document of maintenance of water sanitation, waste disposal including biomedical waste in the hospital

Name of the Hospital:

Date of observation:

Details of Water Sanitation:

- Source of water supply to the hospital:
- Capacity of the water reservoir:
- Cleanliness and maintenance of the reservoir tank:
- Method of Sanitation adopted:
- Frequency of sanitation:
- Periodic check-up of the valves/ pipes and the taps:
- Frequency of Periodic internal audit:
- Frequency of Periodic external audit:
- No. of cases of water borne diseases reported during last calendar year:
- Dedicated staff appointed:
- Sewage Treatment Plant Available or not:

Disposal of waste disposal including biomedical waste:

- BMW Management committee functioning or not:
- BMW Management guidelines displayed in:

  OPD: IPD:

OT:

Pathology Lab:

- Colored dustbins available:
- Segregation of Dry and Wet waste:
- Staff sensitized regarding BMW management:
- Frequency of waste collection:
- Waste collection vehicle availability:
- BMW report registers available and maintained:
- Subsequent management: Dumping/ Incineration/ Chemical treatment

Signature of student signature of faculty

(Name of the College)

(Approved by –National Commission for Indian System of Medicines, New Delhi &

Name of the University)

Name of the department

Batch- _____

Certificate

This is to certify that, Mr. / Ms. _____, Enrollment Number-_____ has satisfactorily completed the course of activities in (Subject Name) prescribed by the (Name of University) as a part of the Second Professional B.A.M.S. Course.

Examination Seat No.: _____

Date of Examination- _____

Sign. Of Internal Examiner-_____

Sign. Of External Examiner-_____

Sign. of Teacher Sign. of H.O.D.

Contents of Activities

S.No	Name of the Activity topic	Page number
1	Dinacharya	3-7
2	Ratricharya	8
3	Ritucharya	9-10
4	Sadvritta	11
5	Ahara	12-21
6	Roganutpadaneeya	22
7	Rasayana for swastha	23-24
8	Nidra	25
9	Yoga	26-30
10	Disaster management	31-32
11	Janapadodhwamsa	33-38
12	Environmental health	39-42
13	Disinfection	43-44
14	Family welfare program	45-46
15	Mother and Child health	47
16	Preventive geriatrics	48
17	National health programs	49-50
18	School health services	51-52
19	Occupational health	53-54
20	Primary health care	55-56
21	Naturopathy	57-59
22	World health organization and International health agencies	60
23	Health statistics	61

Dinacharya

Serial number of Activity: Date:

Name of the Activity:

Method of Activity:

Describe Method of Activity conducted including photographs

Signature of the Student Signature of the staff

Dinacharya

Serial number of Activity: Date :

Name of the Activity:

Method of Activity:

Describe Method of Activity conducted including photographs

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Dinacharya

Serial number of Activity: Date :

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Method of Activity:

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Dinacharya

Serial number of Activity: Date :

Name of the Activity:

Method of Activity:

Describe Method of Activity conducted including photographs

Signature of the Student Signature of the staff

Ratricharya

Serial number of Activity: Date:

Name of the Activity:

Method of Activity:

Describe Method of Activity conducted including photographs

Signature of the Student Signature of the staff

Ritucharya

Serial number of Activity: Date:

Name of the Activity:

Method of Activity:

Describe Method of Activity conducted including photographs

Signature of the Student Signature of the staff

Ritucharya

Serial number of Activity: Date:

Name of the Activity:

Method of Activity:

Describe Method of Activity conducted including photographs

Signature of the Student Signature of the staff

Sadvritta

Serial number of Activity: Date:

Name of the Activity:

Method of Activity:

Describe Method of Activity conducted including photographs

Signature of the Student Signature of the staff

Ahara

Serial number of Activity: Date:

Name of the Activity:

Method of Activity:

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Method of Activity:

Describe Method of Activity conducted including photographs

Signature of the Student Signature of the staff

Roganutpadaneeya

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Nidra

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Yoga

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Disaster management

Serial number of Activity: Date:

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Disaster management

Serial number of Activity: Date:

Name of the Activity:

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Janapadodhwamsa

Serial number of Activity: Date:

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Serial number of Activity: Date:

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Environmental health

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Family welfare program

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Mother and Child health care

Serial number of Activity: Date:

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Method of Activity:

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Preventive geriatrics

Serial number of Activity: Date:

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National health programs

Serial number of Activity: Date:

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National health programs

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School health services

Serial number of Activity: Date:

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School health services

Serial number of Activity: Date:

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Signature of the Student Signature of the staff

Occupational health

Serial number of Activity: Date:

Name of the Activity:

Method of Activity:

Describe Method of Activity conducted including photographs

Signature of the Student Signature of the staff

Occupational health

Serial number of Activity: Date:

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Primary health care

Serial number of Activity: Date:

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Primary health care

Serial number of Activity: Date:

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Naturopathy

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Naturopathy

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World health organization

Serial number of Activity: Date:

Name of the Activity:

Method of Activity:

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Health statistics

Serial number of Activity: Date:

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Method of Activity:

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COURSE CURRICULUM FOR THIRD PROFESSIONAL BAMS
(PRESCRIBED BY NCISM)



Kayachikitsa including Manasa Roga, Rasayana and Vajikarana (Internal Medicine including Psychiatry Rejuvenative Medicine, Reproductive Medicine and Epigenetics)

(SUBJECT CODE : AyUG-KC)

(Applicable from 2021-22 batch, from the academic year 2024-25 onwards for 5 batches or until further notification by NCISM, whichever is earlier)

ncism

।। आयुषे सर्वलोकानाम् ।।

BOARD OF AYURVEDA
NATIONAL COMMISSION FOR INDIAN SYSTEM OF MEDICINE
NEW DELHI-110026

NCISM

III Professional Ayurvedacharya
(BAMS)
Subject Code : AyUG-KC

Kayachikitsa including Manasa Roga, Rasayana and Vajikarana
(Internal Medicine including Psychiatry Rejuvenative Medicine, Reproductive Medicine and Epigenetics)

Summary

Total number of Teaching hours: 450			
Lecture (LH) - Theory		**150**	**150(LH)**
Paper I	61		
Paper II	43		
Paper III	46		
Non-Lecture (NLHT)		**90**	**300(NLH)**
Paper I	35		
Paper II	24		
Paper III	31		
Non-Lecture (NLHP)		**210**	
Paper I	64		
Paper II	85		
Paper III	61		

Examination (Papers & Mark Distribution)					
Item	**Theory Component Marks**	**Practical Component Marks**			
		Practical	**Viva**	**Elective**	**IA**
Paper I	100	100	70	-	30
Paper II	100				
Paper III	100				
Sub-Total	300	200			
Total marks	500				

Important Note :- The User Manual III BAMS is a valuable resource that provides comprehensive details about the curriculum file. It will help you understand and implement the curriculum. Please read the User Manual III before reading this curriculum file. The curriculum file has been thoroughly reviewed and verified for accuracy. However, if you find any discrepancies, please note that the contents related to the MSE should be considered authentic. In case of difficulty and questions regarding curriculum write to **syllabus24ayu@ncismindia.org**

PREFACE

The evolving landscape of healthcare necessitates a dynamic and integrative approach to medical education, particularly in Ayurveda. Kayachikitsa, the branch of internal medicine in Ayurveda, forms the clinical foundation for understanding, diagnosing, and managing diseases based on Ayurvedic principles. This revised competency-based syllabus ensures that students gain a holistic understanding of disease processes, blending traditional wisdom with modern advancements to provide effective, patient-centered care. The curriculum is designed to develop critical thinking, diagnostic skills, and clinical expertise, enabling students to interpret investigations, understand disease pathology (Samprapti), and apply individualized treatment strategies. Special emphasis is placed on emergency medicine (Atyayik Chikitsa), Rasayana, Vajikarana, and Apunarbhava Chikitsa, ensuring that students are well-equipped to handle both acute and chronic conditions.

Kayachikitsa builds upon the fundamentals learned in the first and second professional years, such as Kriya Sharira, Dosha-Dhatu-Mala Vijnana, and Roga Nidana Vikriti Vijnana. By the third professional year, students transition from understanding disease formation to Samprapti Vighatana (breaking the disease process) and applying treatment protocols based on Hetu, Linga, and Aushadha. The syllabus has been structured into three papers: Vyadhi Vishesh Chikitsa – I, Vyadhi Vishesh Chikitsa – II, and Vyadhi Vishesh Chikitsa Evam Rasayana-Vajikarana. The curriculum integrates ICD codes for disease classification, making it easier for students to correlate Ayurvedic and contemporary medical terminologies. Additionally, it includes the management of newly emerging diseases (Anukta Vyadhi), zoonotic infections (Kasherukajeeva-janya Vyadhi), and infectious conditions (Sankramika Jvara), reinforcing Ayurveda's relevance in addressing modern health challenges.

The new syllabus incorporates core Ayurvedic competencies, interdisciplinary integration, and hands-on clinical training to ensure students develop expertise in both Ayurvedic and contemporary medical approaches. Emphasis is also placed on research methodology, ethics, and professionalism, preparing students to contribute to evidence-based Ayurvedic practice. This curriculum is the result of collective efforts by experts in Ayurvedic education, clinical practice, and modern medicine, ensuring that students emerge as confident, skilled, and compassionate practitioners. By equipping them with practical knowledge, research acumen, and ethical grounding, this syllabus strengthens the role of Ayurveda in comprehensive healthcare, making it a vital contributor to global health and well-being.

INDEX

Course Code and Name of Course 5
Table 1 : Course learning outcomes and mapped PO 5
Table 2 : Contents of Course 6
Paper 1 6
Paper 2 9
Paper 3 11
Table 3 : Learning objectives of Course 15
Paper 1 15
Paper 2 55
Paper 3 92
Table 4 : NLHT Activity 130
Table 5 : List of Practicals 138
Table 6 : Assessment Summary: Assessment is subdivided in A to H points 142
6 A : Number of Papers and Marks Distribution 142
6 B : Scheme of Assessment (Formative and Summative) 142
6 C : Calculation Method for Internal assessment Marks 142
6 D : Evaluation Methods for Periodical Assessment 143
6 E : Question Paper Pattern 144
6 F : Distribution of theory examination 145
Paper 1 145
Paper 2 145
Paper 3 145
6 G : Instructions for UG Paper Setting & Blue print 147
6 H : Distribution of Practical Exam 148
References Books/ Resources 150
Syllabus Committee 154
Abbreviations 159

Course Code and Name of Course

Course code	Name of Course
AyUG-KC	Kayachikitsa including Manasa Roga, Rasayana and Vajikarana

Table 1 : Course learning outcomes and mapped PO

SR1 CO No	A1 Course learning Outcomes (CO) AyUG-KC At the end of the course AyUG-KC, the students should be able to-	B1 Course learning Outcomes mapped with program learning outcomes.
CO1	Appraise the knowledge of health and diseases along with principles and practices of kayachikitsa in various ailments of adult population in alignment with Trisutra concept.	PO1
CO2	Integrate the application of multidisciplinary sciences, tools and techniques for a biopsychosocial approach towards diagnosis, prognosis & management of diseases including anukta roga to restore dhatusamya.	PO2,PO3,PO5
CO3	Construct treatment plans/protocols applying yukti in accordance with the Chikitsa sutra including pathya apathya with appropriate documentation adhering to legal, safety and regulatory standards.	PO1,PO3,PO4,PO5
CO4	Demonstrate the application of Rasayana and Vajikarana as prophylactic, therapeutic, restorative and palliative medicine.	PO1,PO4,PO5
CO5	Perform various skills (Karma kaushalya) in dealing with atyayika avastha including first aid and primary management.	PO2,PO4,PO5
CO6	Demonstrate self directedness in pursuit of new advancements in the field of biomedical research and government health care policies.	PO7,PO9
CO7	Demonstrate agility, virtuous, ethical behaviour, compassion and communicate effectively with patients, relatives, and stakeholders about the prognosis and treatment including informed consent.	PO6,PO8,PO9

Table 2 : Contents of Course

Paper 1 (Vyadhi Vishesha Chikitsa - 1)						
Sr. No	**A2 List of Topics**	**B2 Term**	**C2 Marks**	**D2 Lecture hours**	**E2 Non-Lecture hours Theory**	**E2 Non-Lecture hours Practical**
1	**Kaya, Chikitsa and Kayachikitsa - Nirukti, Paribhasha, Paryaya and Bheda** Explanation of Kaya, Chikitsa and Kayachikitsa according to different Classical texts	1	3	1	1	0
2	**Clinical ethics in the practice of Kayachikitsa** • Doctor patient relationship • Good communication skills • Ethical and legal issues in the practice of Kayachikitsa(Ayurveda Medicine) .	1	7	1	0	4
3	**Samprapti vighatana, Chikitsa sutra, Chikitsa, Aushadha yoga and Pathyaapathya of Jvara (SP51/TM2)** • Nava jvara chikitsa • Jeerna jvara chikitsa • Nija jvara and Sannipataja jvara chikitsa • Agantuja jvara chikitsa • Dhatugata jvara chikitsa • Vishama jvara chikitsa • Punaravartaka jvara chikitsa	1	22	11	7	4
4	**Anuktaroga treatment principles based on Doshadushyadi vivechana** • Chikitsa yojana of Anukta roga • Anukta roga upadrava chikitsa	1		1	1	2
5	**Chikitsa of Sankramika jvara** • Vishama jvara(Malaria) • Antrika jvara(Typhoid) • Dandaka jvara(Dengue)	1		2	4	8

	• Sandhiga sannipata jvara(Chikungunya) • Mastishkavarana shotha jvara(Meningitis) • Mastishka shotha(Encephalitis) • Shwasanaka jvara(Pneumonia)					
6	**Chikitsa of Rasa pradoshaja vikara** • Pandu roga (SL80) • Hematopoietic diseases - Raktalpata(Anaemia), Kuposhanajanya raktalpata(Nutritional Anaemia) • Anuvanshika raktavikara- (Thalassemia, hemoglobinopathies, Sickle cell Anaemia), Raktakarka (Leukaemia), Haemolytic anaemia, Thrombocytopenia • Hridroga ,Hridshoola (SL61, SL6Z) • Uchcha raktachaapa (Hypertension), Hrudgata dhamanisanga vikara (Coronary artery disease-Ischemic heart disease and Myocardial Infarction), Hrudgata rakta -Sankulanjanya karya-akshamata(congestive cardiac failure). Hrudgati vaishamya(Conduction defects of heart) • Aamavata (SP11) (Rheumatoid Arthritis) • Madatyaya (SQ20)	2	18	12	6	16
7	**Chikitsa of Rakta pradoshaja vikara** • Kaamala (SM41, SM42, SM43) Jaundice • Yakrut shotha(Hepatitis), , Yakrutdalyodara(Liver cirrhosis), Madyaatirek janya yakrut vikara(Alcoholic liver disease) and Madya-etar karana janya yakrut vikara(Non- Alcoholic Fatty Liver Disease -NAFLD), madya-etar vasamaya-janya yakrut shotha(Non-Alcoholic Steato-hepatitis -NASH), yakrut koshakiya arbuda (Hepatocellular Carcinoma) • Raktapitta (SL81) • Raktaskandana sambandhi vikara (Coagulation disorders) Vanshanugata adhiraktasrava pravrutti (Heriditary - Haemophilia), Acquired-Immune thrombocytopenia -ITP • Vatarakta (SP14) Gout • Parisariya sira dhamaniya vikara (Peripheral vascular diseases) • Mada, Murchha, Sanyasa (SQ22, SP98) • Visarpa (SN4T)Erysipelas, Shingles,	2	24	22	11	18

	• Kushtha and Kilasa/Shwitra (SN40, SN43, SN46, SN48, SN49, SN4A, SN4B SN4D, SN4P, SN4U) • Anurjatajanya tvak vikara(Allergic skin disorders - Atopic dermatitis/Eczyma, Urticaria), shalkayukta tvak vikara (Squamous lesions) - Psoriasis, Shewalikabha tvak vikara (Lichen planus), Visphota (Bullous lesion), Udasphotanvika tvak vikara (Pemphigus and Pemphigoid lesions) • Sheetapitta, Udarda, Kota and Utkota (SN4K, SN4L) • Daha					
8	**Chikitsa of Kshudra roga** • Identification and chikitsa of - Yavaprakhya(SN5Y), Andhalaji(SN5Y), Vivritta(SN5Y), Kacchapika,(SN9Y) Indravriddha, Gardabhi, Jalagardabha(SM0Y), Irivellika(SN5Y), Gandhanama(SN5Y), Kaksha(SN4T), Visphotaka(SN4P), Agnirohini, Vidarika(SP9Y), Sharkararbuda(SP71), Pama(SN46), Vicharchika(SN43), Rakasa(SN40), Padadari, Alasa(SN48), Masurika, Tilkalaka(SN4E), Masaka(SN4H), Nyaccha(SN5Y), Vyanga(SN4G), Nilika(SN41) • Identification and chikitsa of - Ajagallika(SN5Y), Valmika(SN5Y), Panasika, Pashanagardabha(SM1D), Chippa, Kunakha(SN6Y), Anushayi(SP9Y), Kadara(SN9Y), Indralupta(SN90), Darunaka(SN91), Arumshika(SN70), Palitya, Yuvanpidika(SN4V), Padminikantaka(SN5Y), Jatumani(SN4F), Charmakeela, Parivaritika(SN0A), Avapatika, Niruddhaprakasha(SN0A), Sannirudhaguda(SM5Y), Ahiputana(SN5Y), Vrishanakacchu(SN40), Gudabhramsha(SM55)	3	5	2	1	2
9	**Chikitsa of Mamsapradoshaja and**	3	16	8	2	8

	Medopradoshaja vikara • Galaganda (SL0Y) • Gandamala (SL08) • Arbuda (SP72) • Shosha (SP2Y) • Karshya (SP61) • Sthaulya (SP64) • Prameha (SM8D) • Madhumeha(Diabetes mellitus) (SP60) • Medapachaya(Dyslipidaemia) (SP62) • Sthoulya(obesity) • Arbuda(Neoplasm)					
10	**Shuddha-Ashuddha chikitsa, Chikitsajanita vikara** • Concept of Shuddha chikitsa & Ashuddha chiktsa • Preventive protocol in the General principles of Drug administration, • Concept of Iatrogenic diseases • Chikitsa yojana of drug induced Iatrogenic diseases	3	5	1	2	2
Total Marks			**100**	**61**	**35**	**64**

Paper 2 (Vyadhi Vishesha Chikitsa - 2)						
Sr. No	**A2 List of Topics**	**B2 Term**	**C2 Marks**	**D2 Lecture hours**	**E2 Non-Lecture hours Theory**	**E2 Non-Lecture hours Practical**
11	**Chikitsa of Vatavyadhi** • Vatavyadhi samanya chikitsa • Snayugatavata • Akshepaka chikitsa (SK 30) • Pakshaghata chikitsa(SK22) (Cerebrovascular accident) • Ekangavata(SK22), Sarvangavata(SK22) • Kampavata(SK52) (Parkinson's Disease)	1	24	16	6	26

	• Ardita(SK20) (Bell's palsy) • Manyastambha(SP44) • Jihwastambha(SK22) • Avabahuka(SP15), Vishwachi(SK51) • Gridhrasi(SP20) (Sciatica) • Khanja(SK2Y), Pangu(SK21), Kalayakhanja • Padadaha(SK51), Padaharsha(SK54) • Parisareeya Nadishotha(Peripheral Neuropathy) • Urustambha(SP46) • Udarvarta(SM35) • Tantrikaanughata(Guillan Barre syndrome), Tantrighata(Motor Neuron Disease), Anuprasthiya-sitamajjachadda shotha(Transverse Myelitis), Peshi dourbalya(Myasthenia Gravis)					
12	**Chikitsa of Asthi-Majja pradoshaja vikara (SR54) (SR55)** • Asthisoushirya (Osteoporosis), Asthikshaya (Osteopenia) (SP00) • Sandhigata vata (SP12) (Osteoarthritis), Vatakantaka(SP4Y)(Calcaneal Spur), • Kateegraha(SP42(Lumbar spondylosis), Greeva graha(SP45) • Kroshtuka sheersha • Raktaheenatajanya dhatunasha(AvascularNecrosis) • Katishoola(Lumbago), Kasheruka vyadhi(Spondylopathies), • Asthisankatarbuda(Osteosarcoma)	2	14	8	4	11
13	**Chikitsa of Pranavaha Srotodushti Vikara (TM2:SL40-SL4Z)** • Shwasa (SL42), Hikka(SM74) • Kasa(SL41), Urahkshat • Rajayakshma • Tamaka Shwasa(Bronchial Asthma) (SL40) • Jirna Shwasakrichchhanika (Chronic Obstructive Pulmonary Disease) • Antaraalayi Phuphphusa Vikara (Interistitial Lung Disease) • Vispharah (Bronchiectasis) • Phuphphusasruti(Pleural effusion) • Phuphphusa arbuda (Lung Cancer)	2	24	6	4	24
14	**Chikitsa of Udakavaha srotodushti vikara**	3	10	5	2	8

	• Trishna • Shotha(SP91) • Udara-Jalodara (Ascites) (SM32) • Jaliyovidyutansha vaishamya(Fluid & Electrolyte Imbalance)					
15	**Chikitsa of Mootravaha srotodushti vikara** • Mootrakrichchha (SM82) • Mootraghata (SM81) • Ashmari (SM8C) • Mootranalika shotha(UTI), Vrikka koshika shotha(Nephritis),(SM84) • vrikka nishkriyata(Renal failure) • Mootraashmari(Urolithiasis) • Pourusha granthi vriddhi(Benign prostatic hyperplasia) • Apavrukkatva(Nephrotic Syndrome)	3	12	4	4	8
16	**Chikitsa of Purishavaha srotodushti vikara (SR5A)** • Atisara(SM37) • Pravahika(Dysentery)(SM38) • Arsha (SM53) • Raktatisara(Ulcerative colitis)(SM37) • Krimi • Bruhadaantra arbuda (Colorectal cancer)	3	16	4	4	8
Total Marks			**100**	**43**	**24**	**85**

Paper 3 (Vyadhi Vishesha Chikitsa Evam Rasayana, Vajikarana)						
Sr. No	**A2 List of Topics**	**B2 Term**	**C2 Marks**	**D2 Lecture hours**	**E2 Non-Lecture hours Theory**	**E2 Non-Lecture hours Practical**
17	**Chikitsa of Annavaha srotodushti vikara** • Agnimandya, Aruchi/ Arochaka • Ajeerna/ Alasaka/ Vishuchika, Vilambika(SM 3A 3B) • Aanaha/ Aatopa/ Aadhmana(SM31) • Amlapitta(SM-39), Bhasmaka	1	16	12	4	14

	• Parinama shoola, Annadrava shoola- (SM 3A,3B,3C,3D,3E), Shoola (SM33) • Chhardi(SM-3L) • Gulma(SM 3K) • Grahani(SM -36) • Annadravashoola-Parinamashoola(Acid peptic disease) • Amlapitta(Gastro esophageal reflux disease) • Grahani(Irritable bowel syndrome) • Udarastha karkatarbuda-Malignancies of abdomen (Ca Pancreas, Ca Duodenum/Stomach)					
18	**Chikitsa of Manovaha srotas dushti vikara** • Manasika vikara like Kaama, krodha, Lobha, Mada, Maatsarya, Shoka, Bhaya, Dainya, Harsha • Unmada roga (SQ03) • Apasmara roga(SK30) • Atattvabhinivesha(SQ04) • Chittodvega & Vishada • Chinta(General Anxiety Disorder) • Nidra vikara(Sleep Disorder) • Bhaavodvega(Somatoform and mood disorder) • Pratyabalajanya vikara(Stress induced disorder) • Kaamonmada(Psychosexual disorders) • Atattvabhinivesha(Obsessive compulsive disorder,Nurotic disorder) • Vyaktatva evum swabhav viparyaya(Personality and behavioral disorder) • Manoavasada(Depression) • Medhya rasayana in Manoroga • Identification of Bhutonmada and its basic management	2	10	8	4	8
19	**Chikitsa of of Antahsravi Granthi vyadhi** • Avatuka Granthi(Thyroid) Disorders: Manda vatuka(Hypothyroidism) & Tivra vatuka(Hyperthyroidism)(SP9Y) • Pravaravatuka Granthi Vyadhis (Parathyroid) Disorders:	2	10	4	4	4

	Hypoparathyroidism & Hyperparathyroidism • Piyusha Granthi vikara(Pituitary Disorders): Hypopitutarism-vamanata(Dwarfism)(SP9Y) Atihrisvata & Hyperpitutarism-Dirghakayata(Gigantism) (Atidirgha) and Vikayata(Acromegaly) Udakameha(Diabetes Insipidus) • Adhivrikka granthi vikara(Adrenal gland Disorders): Hyperaldosteronism- Tivra upavrikkasrava(Addison's disease) & Hypoaldosteronism-Upavrikkasrava mandya(Cushing's Syndrome)					
20	**Chikitsa of Vyadhikshamatva vikara** • Vyadhikshamatva heenata vikara (Immunodeficiency diseases -Primary and secondary immune deficiency disorders) • Atmapratirodha-Kshamatva Vikara (Auto immune disorders) • Pratirakshaja(Systemic Lupus Erythematosis-SLE) • Vamshakasheru ruk(Ankylosing Spondylitis-AS) • Drutotak(Multiple Sclerosis-MS) • Aamavata(Rheumatoid Arthritis) • Atisamvedanasheelata-janya vyadhi (Hypersensitiviy Reactions**)**	2	8	3	4	3
21	**Chikitsa of Shukravaha srotasa vikara** • Klaibya (SN02) • Shukralpata (SN03) • Shukradosha • Kshinashukra • Dhwajabhang • Kapourushya(Male hypogonadism) • Napunsakatva(Impotence) • Vandhyatva(Infertility)	3	8	3	4	4
22	**Chikitsa of Guhya roga** • Phiranga(SN31) Upadamsha(SN30)	3	8	2	2	2

	• Phiranga(Syphilis)(SN31) • Puyameha(Gonorrhoea)(SN30) • Vankshaneeya lasika granthikanarbud(Lymphomagranuloma Inguinale) • Phirangiya vrana(Soft Chancroid) • Visarpa(Herpes Simplex)(SN4T)					
23	**Vajikarana** • Principles, benefits & need for Vajikarana • Shuddha Shukra, Vajikarana dravya in Shukravaha srotodushti vikara • Vajikarana dravya in Klaibya(infertility) & Shandhatva(impotency) • Interpretation of investigation in Shukravaha srotodushti vikara • Phalashruti, Sevana kala, Matra & Anupana of various Vajikarana yoga	3	12	6	3	6
24	**Rasayana** • Principles, indications & dosage of Rasayana according to the ayu(age) • Aachara Rasayana in clinical practice • Evidence based Rasayana • Naimittika rasayana • Medhya rasayana • Kanthya rasayana • Varnya rasayana • Keshya rasayana • Chikitsa karmukatva, Matra, Sevana kala & Anupana of various Vyadhihara rasayana	3	20	6	4	8
25	**Chikitsa of Jarajanya vikara and Indriyapradoshaja vikara** • Jarajanya vikara(Geriatric Disorders) • Indriyapradoshaja vikara(sensory & cranial nerve disorders) • Smritilopa(Alzheimer's disease)	3	8	2	2	12
Total Marks			**100**	**46**	**31**	**61**

Table 3 : Learning objectives of Course

Paper 1 (Vyadhi Vishesha Chikitsa - 1)

A3 Course out come	B3 Learning Objective (At the end of the session, the students should be able to)	C3 Domain/sub	D3 MK / DK / NK	E3 Level	F3 T-L method	G3 Assessment	H3 Assessment Type	I3 Term	K3 Integration	L3 Type
Topic 1 Kaya, Chikitsa and Kayachikitsa - Nirukti, Paribhasha, Paryaya and Bheda (LH :1 NLHT: 1 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO1	Explain the Nirukti, Paribhasha, Paryaya and Bheda of the term ‘Kaya’, ‘Chikitsa’ and ‘Kayachikitsa’.	CC	MK	KH	L&PPT,REC	M-POS,VV-Viva,PRN,QZ	F&S	I	-	LH
CO1	Advice the appropriate type of Chikitsa to the simulated case	CAP	MK	KH	RP,DIS	CBA,Log book,VV-Viva	F&S	I	-	NLHT1.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 1.1	Selection of the appropriate treatment for a simulated case, enacted role play	Role play - 1 hour • The Mentor assigns the role (Vaidya, Rogi, and bystander) to 3 students of the allotted batch on a rotation basis for the role-play • Students prepare themselves to perform their assigned roles in the role-play • The mentor instructs other students(viewers) in the batch to draft an appropriate Chikitsa for the enacted role play based on the Chikitsa bheda (Dvividha, Trividha,etc) • THe mentor concludes the session with remarks

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity

Topic 2 Clinical ethics in the practice of Kayachikitsa (LH :1 NLHT: 0 NLHP: 4)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO7	Explain the ethical principles, effective communication and professionalism in clinical practice	CC	MK	KH	L&PPT	M-POS,VV-Viva,DEB,COM,PRN	F&S	I	-	LH
CO7	Practice good communication skills and professionalism in healthcare	AFT-RES	MK	SH	SIM	P-EXAM,P-PRF,PM	F&S	I	-	NLHP2.1
CO7	Perform the ethical decision-making skills in clinical practice	AFT-RES	MK	SH	CBL	P-RP,P-EXAM,CBA	F&S	I	-	NLHP2.2

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 2.1	Communication skill and professionalism	Simulation - bedside 2 hours • The mentor selects few students from the allotted batch, takes them to the simulation bedside and assigns the role of Doctor and Patient • The mentor provides the instructions to be followed by each one (doctor, patient and viewers) and advises them to play their roles efficiently • The Viewers (Students) need to be vigilant and notify any discrepancy/breech during the process of communication/professionalism between doctor and patient • The mentor concludes the session with final remarks

NLHP 2.2	Ethical Principles in Clinical Practice	Case based learning - 2 hours The Mentor provides case scenarios pertaining to • Patient's Autonomy (informed consent vs Coercion) • Balancing Beneficence and Non- Maleficence • Ethical handling of end-of-life decisions • Resource allocation in a crisis • Confidentiality • Ethical handling of medical errors Students enact the scenario, discuss and present the given case scenario incorporating the concept of clinical ethics The mentor observes the ethical decision making skills of the students The mentors serve as observers and facilitators The mentors provide the concluding remarks

Topic 3 Samprapti vighatana, Chikitsa sutra, Chikitsa, Aushadha yoga and Pathyaapathya of Jvara (SP51/TM2) (LH :11 NLHT: 7 NLHP: 4)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO3	Detail the treatment algorithm for Jvara according to stages of Shadkriyakala	CC	MK	KH	L&PPT ,L&GD	P-REC,T-CS,VV-Viva	F&S	I	-	LH
CO1, CO3	Create a treatment plan for Saama stages in Jvara and explain Taruna jvara Chikitsa (Nava jvara Chikitsa/Pachana-upaya Chikitsa in Jvara)	CS	MK	KH	REC,L &PPT ,L&GD	T-CS,P-REC,VV-Viva	F&S	I	-	LH
CO1, CO3	Create a treatment plan for Nirama stages in Jvara and explain Purana jvara chikitsa(Jeerna jvara chikitsa)	CS	MK	KH	DIS,REC,L&PPT	P-EXAM,VV-Viva,T-CS	F&S	I	-	LH

CO1, CO3	Describe the management of Nija jvara and Sannipata jvara	CC	MK	KH	L&PPT ,REC,L &GD	T-CS,VV-Viva,P-EXAM	F&S	I	-	LH
CO1, CO3	Describe the management of Agantuja jvara	CC	MK	KH	PER,L& PPT ,L&GD	PRN,T-CS, VV-Viva	F&S	I	-	LH
CO1, CO3	Detail the Dhatugata jvara Chikitsa	CC	MK	KH	L,L&G D,L&PP T ,DIS	T-CS,PRN, VV-Viva	F&S	I	-	LH
CO1, CO3	Describe the management of Vishama jvara	CC	MK	KH	L&PPT ,REC,L	INT,VV-Viva,P-EXAM,T-CS	F&S	I	-	LH
CO1, CO3	Plan the treatment according to the status of Ojus in Punaravartaka jvara	CS	MK	KH	REC,L, L&PPT	VV-Viva,PRN,DEB,T-CS	F&S	I	-	LH
CO1, CO3	Differentiate the appropriate Shodhana and Shamana Chikitsa in Jvara	CK	MK	KH	L&PPT ,L,L&G D	PRN,INT,VV-Viva	F&S	I	H-KB	LH
CO1, CO3	Explain the Bahirparimarjana chikitsa and Daivavyapasraya chikitsa in the management of Jvara	CAN	MK	KH	L&PPT ,L&GD	T-CS,VV-Viva,INT	F&S	I	-	LH
CO1, CO3, CO4	Prescribe the Pathyapathya and Rasayana in the management of Jvara	CS	MK	KH	L,DIS,L &PPT	DEB,PRN,INT,T-CS	F&S	I	-	LH
CO1, CO2	Discuss the Avastha and construct the Chikitsa yojana of Jvara	CC	MK	KH	CBL,DIS,TBL	P-CASE,PRN,P-VIVA	F&S	I	-	NLHT3.1

CO1, CO2	Discuss the clinical understanding of Nija jvara,Sannipata jvara and Aagantuja jvara and construct the Chikitsa yojana.	CC	MK	KH	PER,CBL,BS,SIM	P-VIVA,INT,P-EXAM	F&S	I	-	NLHT3.2
CO1, CO3	Discuss the importance of Langhana Chikitsa in Jvara	CC	MK	KH	L&GD, FC,CBL	T-CS,CL-PR	F&S	I	-	NLHT3.3
CO1, CO3	Point out the importance of Ksheera prayoga and Ghrita prayoga in Jvara	CAN	MK	KH	CBL,L&GD,FC	INT,T-CS,PRN	F&S	I	-	NLHT3.4
CO1, CO3	Discuss the clinical understanding of Dhatugata jvara,Vishama jvara, Punaravartaka jvara and construct the Chikitsa yojana	CC	MK	KH	REC,L&GD,DIS	PRN,T-CS,DEB	F&S	I	-	NLHT3.5
CO1, CO3	Discuss the clinical understanding and management of various varieties of Jvara.	CC	MK	KH	L&GD, PBL,BS	P-EXAM,PRN,T-CS	F&S	I	-	NLHT3.6
CO1, CO3	State the Phalashruti,Sevanakala,Matra,Anupana of the given Aushadha kalpana	CK	MK	K	SDL,PER,L&GD	INT,DEB,PRN	F&S	I	-	NLHT3.7
CO1, CO2, CO3, CO6, CO7	Demonstrate and write a case and construct the Chikitsa of Jvara	PSY-GUD	MK	SH	CBL,CD,D-BED,LRI	PRN,P-VIVA,P-CASE, P-EXAM	F&S	I	-	NLHP3.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 3.1	Clinical understanding and treatment of Jvara according to its different stages(Avasthanusara Jvara chikitsa)	**Team based learning, Discussion**

		• A few students are selected and divided into 3 teams. • Each team is allotted a specific stage of Jvara (Ama, Pachyamana, and Pakva) along with its management. • The teams refer to and compile material from library sources and prepare a presentation. • Each team presents the allotted topic. • Other students are encouraged to interact and discuss the presentations under the supervision of the mentor. • The mentor provides concluding remarks on the presentations.
NLHT 3.2	Clinical understanding of Nija jvara,Sannipataja jvara and Agantuja jvara and its Chikitsa yojana	**Case Based Learning, Simulation** • The mentor allots simulated cases on the topic to the students. • The students are expected to diagnose and chart out an appropriate Chikitsa yojana along with its Pathyapathya. • A discussion is generated among the students on the given topic. • The mentor concludes the class with remarks.
NLHT 3.3	Importance of Langhana Chikitsa in Jvara	**Flipped class room, Group discussion** • Students are asked to prepare a presentation on the role of Langhana Chikitsa in Jvara. • The next day, students present the allotted topic. • Students are encouraged to participate in the discussion. • The mentor supervises the process and provides guidance.
NLHT 3.4	Importance of Ksheera prayoga and Ghrita prayoga in Jvara	**Group Discussion, Flipped class room** • The students are divided into 2 groups. • Topic is assigned to two groups as follows-: • One group refers to the topic of Ksheera Prayoga in Jvara. • The other group is allotted the topic of Ghrita Prayoga in Jvara.

		• Both groups present their respective topics in the class using PowerPoint. • A discussion is conducted among the students on the given topic. • The mentor supervises the discussion and concludes the class with remarks.
NLHT 3.5	Clinical understanding and management of Dhatugata jvara,Vishama jvara and Punaravartaka jvara	**Group Discussion, Recitation** • The students are instructed to refer to the management of Dhatugata jvara Vishama jvara and Punaravartaka jvara from Samhitas/Ayurvedic Literature • The students are asked to start a discussion on the topic. • The mentor supervises the process and provides guidance.
NLHT 3.6	Understanding the Nidana panchaka and framing the management of various varieties of Jvara through case scenario.	**Problem based learning, Brainstorming** • The students are divided into different groups. • Each group is allotted different varieties of Jvara through case scenario • All groups members discuss the problem and formulate a treatment protocol with its rationale • The students start interaction and discussion on the topic. • The mentor supervises the process and provides guidance.

NLHT 3.7	Phalashruti,Sevanakala,Matra,Anupana of the given Aushadha kalpana
	
	• Shadanga paneeya
	• Amritottaram Kashaya
	• Indukantam Kashaya
	• Vishamajvara nashaka kashaya
	• Sudarshana churna
	• Mrityunjaya rasa
	• Amritarishta
	• Pippalyadi Ghrita
		Self directed learning, Presentation
		
		• The students are divided into small groups.
		• Each group is allotted specific Aushadha yogas.
		• The students are asked to refer to the Aushada kalpana with its
		  ◦ Phalashruti
		  ◦ Sevanakala
		  ◦ Matra
		  ◦ Anupana
		• The students compile the material, prepare a presentation, and present it to the class.
		• Students are encouraged to interact with the presenter under the supervision of the mentor.

	• Aparajita dhoopa	• The mentor provides concluding remarks on the presentations.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 3.1	Diagnose and constuct the Chikitsa yojana of Jvara(Nava jvara/Purana jvara/Nija jvara/Sannipata jvara/Agantuja jvara/Dhatugata jvara/Vishama jvara/Punaravartaka jvara)	Cases in the IPD 2 Bedside cases = 4 hours **Demonstration bedside** • The Mentor takes students to the ward/OPD of Kayachikitsa, dividing them into small groups. • Mentor assigns each group a case OR Students in the clinical batch select a case. • Mentor shows the construction of the Chikitsa yojana and documenting it in the following steps: • The students shall introduce themselves to the patient and take verbal consent. • The students shall interrogate the patient and document the clinical history. • The students further brief the patient about the steps in examination that will be performed on him/her. • The students perform the relevant clinical examinations adopting the Ayurvedic and conventional clinical methods of examination. • The necessary investigations are proposed by the students. • The investigation reports are interpreted. • The students analyze the Nidana panchaka and the extent of alteration in Samprapti ghataka. • The students interpret the collected information and state the Vyadhi nama (arrive at a tentative clinical diagnosis) following the method of Vyavachedaka nidana (differential diagnosis) • The students determine the Sadhyaasadhyata (prognosis) of the disease in the patient. • The students construct the chikitsa yojana for the diagnosed disease. • The students recommend Pathyaapathya to the patient. • Finally, the students address the patient's doubts & acknowledge his/her cooperation in the case taking.

		• The students present and discuss the documented case. • The mentor facilitates the case presentation. • The mentor evaluates the student's performance, knowledge, psychomotor and communication skills using rubrics or checklists and gives feedback. • Remedial measures should be implemented if found necessary.

Topic 4 Anuktaroga treatment principles based on Doshadushyadi vivechana (LH :1 NLHT: 1 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO2	Formulate the Chikitsa yojana of Anukta Roga considering its Nidana panchaka	CS	MK	KH	L&PPT	M-POS,QZ ,DEB,PRN, T-CS	F&S	I	-	LH
CO1, CO2	Understand the Dosha-dushyadi vivechana in the management of Anukta roga	CC	MK	K	LS,TBL ,IBL,RP ,LRI	CL-PR,OS PE,M-POS,QZ ,OSCE	F	I	-	NLHT4.1
CO1, CO2	Construct the Chikitsa yojana in a case on Anukta roga along with its complications	PSY-MEC	NK	KH	PBL,SI M,CBL, LRI,D-BED	PUZ,P-CA SE,SP,P-EXAM	F&S	I	-	NLHP4.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 4.1	Understanding of Samprapti vighatana in Anukta roga	Student should illustrate the treatment of Anukta Roga based on Dosha-dushyaadi vivechana in the given situation through Poster presentation

		• The Mentor instructs the students to refer tutorials, library resources, and reading materials on the allotted common situation of clinical findings of Anukta roga • The students in groups are instructed to present their knowledge and ideas on treating Anukta yoga based on Dosha-dushyaadi vivechan by preparing posters, charts, or e-posters. • Students will accordingly present the discussed topics through poster • The Mentor encourages the activity & gives concluding remarks
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 4.1	Chikitsa yojana of Anukta roga & its complications	Students are able to plan the Chikitsa yojana for the Anukta roga & its Upadrava understanding the Doshadushya sammurchhana in a given clinical case/case scenario Case based learning - 2 Short cases x 1hour = 2 hours per batch • The Mentor takes students to the ward/OPD of Kayachikitsa & assigns a case of Anukta Roga. • Mentor shows the art of writing a rational treatment prescription and documenting it in the following steps: • The students shall introduce self to the patient and take verbal consent. • The students shall interrogate the patient and document the clinical history. • The students further brief the patient about the steps in examination that will be performed on him/her. • The students perform the relevant clinical examinations adopting the Ayurvedic and conventional clinical methods of examination of the involved system • The available investigation reports are interpreted by the students. • The students interpret the collected information and state the vyadhi nama (arrive at a tentative clinical diagnosis) following the method of vyavachedaka nidana (differential diagnosis) • The students determine the sadhyaasadhyata (prognosis) of the disease in the patient. • The students formulate a rational treatment prescription for the diagnosed disease & plan the appropriate chikitsa yojana for the upadrava of anukta vyadhi if any . • The students recommend pathyaapathya to the patient. • Finally, the students address the doubts of the patient & acknowledge his/her cooperation in

		the case taking. • The students present and discuss the documented short case. • The mentor facilitates the case presentation. • The mentor evaluates the student's performance, knowledge, psychomotor and communication skills using rubrics or checklist and gives the feedback. • Remedial measures should be implemented if found necessary.

Topic 5 Chikitsa of Sankramika jvara (LH :2 NLHT: 4 NLHP: 8)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO2, CO3	Describe Sankramika jvara and Kasheruka-jeeva-janya vyadhi(zoonotic diseases).Explain the Ayurveda management of Vishama jvara(Malaria) and Antrika jvara(Typhoid) by comprehending the contemporary therapeutic modalities	CC	MK	K	L&PPT ,L_VC	QZ ,PRN	F&S	I	-	LH
CO1, CO2, CO3	Explain the ayurveda management of Vata-shlaishmika jvara(Influenza), Shwasanaka jvara(Pneumonia), COVID and H1N1 by comprehending the contemporary therapeutic modalities	CC	MK	K	L&PPT ,L_VC, L	QZ ,PRN	F&S	I	-	LH
CO1, CO2, CO3	Apply the Ayurveda concepts in the management of Mastishkavarana shotha jvara(Meningitis) Mastishka shotha(Encephalitis) and Dhanurvaata(Tetanus) by assessing the contemporary therapeutic approaches	CAP	DK	KH	L&GD, PER,DI S	CL-PR,PR N,QZ	F&S	I	-	NLHT5.1
CO1, CO2, CO3	Discuss the contemporary therapeutic modalities and frame ayurveda management of Granthika sannipata jvara(Plague), and Leptospirosis	CC	NK	K	BL,L& GD,DIS ,BS	QZ ,PRN,C L-PR	F	I	-	NLHT5.2
CO1, CO2, CO3	Apply the Ayurveda concepts in the management of Beejanu jvara(Anthrax), and Peeta jvara(Yellow fever) by assessing the contemporary therapeutic approaches	CAP	NK	KH	DIS,BS, L&GD, FC	CL-PR,PR N,QZ	F	I	-	NLHT5.3
CO1, CO2,	Summarize the Ayurveda management of Sandhiga sannipata jvara(Chikungunya), Dandaka jvara(Dengue) and	CS	DK	K	L&GD, RP	PRN,QZ	F	I	-	NLHT5.4

CO3	Shleepada(Filariasis) by assessing the contemporary therapeutic approaches									
CO1, CO2, CO3	Demonstrate the Chikitsa yojana & prepare case record in cases of Sankramika jvara after performing relevant clinical examination	PSY-MEC	MK	SH	D-BED, DL,CBL,PT,PBL	CBA,Mini-CEX,P-VIVA,OSCE, P-PRF	F&S	I	-	NLHP5.1
CO1, CO2, CO3	Commemoration of International days	PSY-MEC	DK	SH	PBL,RP,RLE,FV	P-RP,Log book,P-SUR, P-PS,INT	F	I	-	NLHP5.2

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 5.1	Approach to the diagnosis and management of Mastishkavarana shotha jvara(Meningitis) Mastishka shotha(Encephalitis) and Dhanurvaata(Tetanus	**Team based learning** • The students are divided into different teams • One team is asked to present etiopathogenesis and diagnosis of Mastishkavarana shotha jvara(Meningitis), • The second team presents about the topic related to etiopathogenesis and diagnosis of Mastishka shotha(Encephalitis), • The third team presents a detailed presentation about the topic related to etiopathogenesis and diagnosis of Dhanurvaata (Tetanus) • The fourth team does a presentation on the investigations and Principles of management of all • Followed by group discussion • Mentor clears the doubts, answers the queries and gives the concluding remarks.
NLHT 5.2	Approach to the diagnosis and management of Granthika sannipata jvara(Plague) and Leptospirosis	**Blended learning** • Students are given online learning material like description of the online link and scientific

		research articles • Students are divided into various small groups, and they will be allotted topics related to etiopathogenesis, diagnosis, principles of management of Granthika sannipata jvara (Plague) and Leptospirosis • Each group is asked to do a presentation related to the topic given • Group discussion follows • Mentor clears the doubts, answers the queries and gives the concluding remarks
NLHT 5.3	Approach to the diagnosis and management of Beejanu jvara (Anthrax), and Peeta jvara (Yellow fever)	**Flipped classroom** • Student are asked to prepare notes and PPT after referring all the available books and online study material • On the coming day they are asked to lead the class • Followed by Group Discussion • Mentor clears the doubts, answers the queries and gives the concluding remarks
NLHT 5.4	Approach to the diagnosis and management of Sandhiga sannipata jvara (Chikungunya) Dandaka jvara(Dengue) and Shleepada (Filariasis),	**Role play** • The students are divided into many teams • Each team will be assigned the role of doctor, Patient and bystander • They should do the role of the doctor patient and bystander • The other members of team watch the role play and contribute for its refinement • Mentor gives the concluding remarks
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 5.1	Bedside case taking of the given Sankramika jvara	• The Mentor takes students to the ward/OPD of Kayachikitsa, dividing them into the clinical batch, selecting a case. • Mentor shows the art of writing a rational treatment prescription and documenting it in the

		following steps: • The students shall introduce themselves to the patient and take verbal consent. • The students shall interrogate the patient and document the clinical history. • The students further brief the patient about the steps in the examination that will be performed on him/her. • The students perform the relevant clinical examinations adopting the Ayurvedic and conventional clinical methods of examination of the involved system • The necessary investigations are proposed by the students. • The investigation reports are interpreted. • The students interpret the collected information and state the Vyadhi nama (arrive at a tentative clinical diagnosis) following the method of Vyavachedaka nidana (differential diagnosis) • The students determine the Sadhyaasadhyata (prognosis) of the disease in the patient. • The students formulate a rational treatment prescription for the diagnosed disease.
NLHP 5.2	Public awareness activity related to Malaria/hepatitis/epidemic preparedness/vaccination/meningitis/encephalitis	• World malaria day /World dengue day /World hepatitis day /day of Epidemic preparedness /National vaccination day /World meningitis day /World encephalitis day**(** 6 Hours) • **Kinesthetic learning** students are asked to make posters on various aspects of the illness and do an exhibition of the same for the public OR • **Role** play- The students are encouraged to perform a role-play depicting the importance of preventing these diseases and swift action on witnessing the early symptoms. OR • **Public outreach program**- Conduct a survey among the public to assess the susceptibility of infectious diseases and educate them. OR • Organize a rally to create awareness about Prevention OR • conduct medical camps for these disease • Prepare a report with a Geotagged photograph

Topic 6 Chikitsa of Rasa pradoshaja vikara (LH :12 NLHT: 6 NLHP: 16)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO3	Describe the Chikitsa sutra of Rasavaha sroto dushti and explain the Samprapti vighatana, Chikitsa sutra and chikitsa of Pandu	CC	MK	KH	REC,L &PPT	VV-Viva,T -OBT,S-LA	F&S	II	-	LH

	roga (SL80)					Q,P-VIVA				
CO1, CO3	Design a treatment algorithm for Pandu roga according to the stages of Shadkriyakala	CS	MK	KH	L&PPT	QZ ,P-VIVA,VV-Viva	F&S	II	-	LH
CO1, CO3	Construct a Chikitsa yojana (treatment plan) including Rasayana and Pathyaapathya for Pandu roga.State the Phalashruti, Aushadha Sevana-kala, matra, Anupana of the Aushadha yoga in Pandu roga • Navayasa churna • Tapyadi Lauha • Lohasava • Punarnava mandoora • Dadimadi ghrita • Drakshavalehya	CAP	MK	KH	L&PPT	QZ ,VV-Viva,P-VIVA, T-OBT	F&S	II	-	LH
CO1, CO2, CO6	Explain the etiopathogenesis, diagnosis, treatment of Raktalpata (Anaemia) and Kuposhanajanya Raktalpata (Nutritional Anaemia)	CC	DK	K	L&PPT ,L_VC	QZ ,P-VIVA,VV-Viva	F&S	II	-	LH
CO2, CO6	Chart the etiopathogenesis, morphological changes in the Rudhiravarnika(RBC), clinical diagnosis and treatment of Anuvanshika rakta vikara. (Haematopoietic diseases)a. Thalassemia b. Sickle cell Anaemia c. Haemolytic anaemia	CAP	NK	K	SDL,DIS,PER,PL	QZ ,M-CHT,M-POS,PRN,VV-Viva	F	II	-	NLHT6.1
CO1, CO2, CO6	Discuss the etiopathogenesis, diagnosis and treatment of Raktakarkah (Leukemia)	CC	NK	K	PER,DIS,PL	VV-Viva,WP	F	II	-	NLHT6.2
CO1, CO2,	Discuss the etiopathogenesis, diagnosis, treatment of Rudhiravarnika vikara (Haemoglobinopathies).	CC	NK	K	PL,SDL,DIS,FC	QZ ,WP,VV-Viva	F	II	-	NLHT6.3

CO6										
CO1, CO3	Explain the Samprapti vighatana and chikitsa of Hridroga and Hridshoola **(SL61, SL6Z)**	CC	MK	K	L&PPT	VV-Viva,T-CS	F&S	II	-	LH
CO1, CO3	Construct a Chikitsa yojana including the Rasayana and Pathyaapathya for Hridroga and state the Phalashruti, Aushadha sevana kala, Matra, Anupana of the following Aushadha yoga in Hridshoola/Hridroga. **(SL61, SL6Z)** • Prabhakara vati • Hridayarnava rasa • Arjunarishta • Drakshasava • Nagarjunabhra rasa	CAP	MK	KH	L&PPT	VV-Viva,T-OBT,P-VIVA,PUZ,QZ	F&S	II	-	LH
CO1, CO2, CO6	Explain the etiopathogenesis, diagnosis and treatment of Uchcha Raktachapa (Hypertension) and Nyuna Raktachapa (Hypotension)	CC	MK	K	L&PPT ,L_VC	QZ ,T-CS, VV-Viva	F&S	II	-	LH
CO2, CO6	Demonstrate an algorithm for etiopathogenesis and diagnosis of Samanya parisancharana- tantragata- roga (common cardiovascular diseases) and discuss the treatment strategies in brief	CAP	DK	KH	DIS,PL, SDL	VV-Viva,QZ , M-CHT,M-MOD	F&S	II	-	NLHT6.4
CO1, CO2, CO6	Discuss the etiopathogenesis, diagnosis along with treatment of Raktapravaha-hinata-janya hridroga - Hritshoola, Hritpeshiraktalpata, and Hritpeshirodhah (Coronary Artery Diseases- Angina Pectoris, Ischemic heart disease and Myocardial Infarction).	CC	DK	K	TBL,DIS,PBL	PUZ,QZ ,VV-Viva	F&S	II	-	NLHT6.5
CO1,	Discuss the etiopathogenesis, diagnosis along with principles of	CC	DK	K	DIS,TB	T-OBT,VV-	F&S	II	-	NLHT6.6

CO2, CO6	management in Raktaja Hridghaatah (Congestive Cardiac failure) and Hritpaatah (Cardiac arrest and conductive disorders of the cardia).				L,PBL	Viva,T-CS				
CO1, CO3	Explain the Samprapti vighatana, Chikitsa sutra incorporating the applicable Shadvidhopakrama in Aamavata (Rheumatoid Arthritis) **(SP11)**.	CC	MK	K	L&PPT	VV-Viva,S-LAQ	F&S	II	-	LH
CO1, CO3	Design a treatment algorithm according to the stages of Shadkriyakala and construct a chikitsa yojana including Pathyapathya for Aamavata.	CS	MK	KH	L&PPT	T-OBT,T-CS	F&S	II	-	LH
CO1, CO3	State the Phalashruti, Sevana kala, Matra, and Anupana of the Aushadha yoga in Aamavata. • Panchakola kvatha • Amavatari rasa • Ajamodadi churna • Maharasnadi kvatha • Yogaraja guggulu • Simhanada guggulu • Eranda taila • Brihat saindhavadi taila	CK	MK	K	L&PPT	QZ ,T-OBT ,VV-Viva,PUZ	F&S	II	-	LH
CO1, CO3	Describe the Samprapti vighatana of Madatyaya and explain the Chikitsa-sutra along with Chikitsa, Pathya-apathya of Madatyaya.	CC	DK	K	L,L&PPT	VV-Viva	F	II	-	LH
CO1, CO3	State the Phalashruti, Aushadha sevana kala, Matra and Anupana of the following aushadha yoga in Madatyaya **(SQ20)** • Shrikhandasava • Kharjuradi mantha	CK	DK	K	L,L&PPT	VV-Viva	F	II	-	LH

	• Madiphala rasayana • Drakshadi kashaya • Ashtanga lavana									
CO2, CO5, CO6	Demonstrate the steps of Cardio Pulmonary Resuscitation (CPR) on a mannequin (Simulator) in a simulating laboratory.	PSY-MEC	MK	SH	W,D-M, SIM,PT	P-EXAM,Log book,SA,OSPE,CHK	F	II	-	NLHP6.1
CO1, CO2, CO3, CO6, CO7	Sketch a rational treatment prescription for the diagnosed case of Rasa pradoshaja vikara	PSY-GUD	MK	SH	D-BED, LRI,CD ,PER,PSM	DOAP,P-VIVA,CBA, CHK,CWS	F&S	II	-	NLHP6.2
CO1, CO2, CO3, CO6, CO7	Design a Chikitsa yojana for the clinical case of Rasa pradoshaja vikara.	PSY-GUD	MK	SH	CD,PER ,PSM,LRI,CBL	CBA,P-CASE,CWS ,RK,PP-Practical	F&S	II	-	NLHP6.3

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 6.1	An insight into Anuvanshika rakta vikara (Haematopoietic diseases) and their chikitsa.	**Presentation of e-posters/ posters/charts** The students gain an insight into the etiopathogenesis, morphological changes in the RBC, clinical diagnosis of Haematopoietic diseases along with their chikitsa through the activity of e-poster/poster/charts presentation. • The mentor allots the topics to a few students in class.

		• The students are instructed to collect adequate information and materials related to the topic by utilizing library facility and e-resources. • Student prepare e-posters/posters/ charts related to their topics. • On the day of presentation, the students are given a brief introduction on the topic by the mentor as a set induction. • It is followed by students presenting their e-posters/posters/charts during the alloted class. • All students involve in a discussion on the topics presented. • The students clarify their doubts with the presenter and the mentor. • The mentor gives the concluding remarks
NLHT 6.2	Leukemia and its treatment	**Oral presentation using Audio-visual aids** An audio-visual presentation on different varieties of Leukemia along with its treatment to have a gross understanding about the disease. • The mentor allots the topics to a randomly picked group of students on a prior date. • The students refer the related material utilizing institutional library facilities and e-resources and prepare their oral presentations using audio visual aids. • The students in the class are given a brief introduction on the topic by the mentor as a set induction on the day of presentation. • The students proceed with their oral presentations followed by a classroom discussion. • Students clarify their doubts with the presenter/ mentor. • The mentor gives the concluding remarks.
NLHT 6.3	Haemoglobinopathies	**Flipped classroom** • Students learn the varieties of etiopathogenesis, diagnosis, and treatment for Haemoglobinopathies. • The students learn and come prepared for the given topic. • The mentor gives an introduction about Haemoglobinopathies as a set induction. • Students discuss their views on the given topic and put forth their queries to the mentor.

		• The Mentor answers the queries and motivates a healthy interactive session. • The mentor concludes with an appreciation to the students for their interactive participation.
NLHT 6.4	Common Cardiovascular Diseases	**Making of charts/ Model making** Student learn to classify different Cardio vascular diseases and discuss about their treatment principles in brief, using charts and models. • Mentor introduces the topic and gives sufficient time for students to prepare the materials. • Students present charts/ models either individually or in groups. • Students are encouraged to discuss on the topic. • The Mentor concludes the topic.
NLHT 6.5	Diagnosis and treatment of Raktapravaha-hinata-janya hridroga with special reference to Coronary Artery Diseases	**Problem based learning/ Case scenario** Students are encouraged to recognise the abnormality in ECG and interpret the changes related to Coronary artery diseases and plan the suitable treatment. • The students are given a brief introduction to the topic by their mentor. • The mentor presents various case scenarios along with abnormal patterns of ECG. • The mentor discusses the probable diagnosis and possible treatment plans. • The students discuss in small groups and present their findings mentioning the treatment. • Finally Mentor concludes the topic.
NLHT 6.6	Diagnosis and management of Raktaja Hridghaatah and Hritpaatah (Congestive Cardiac failure, Cardiac arrest and Conductive disorders of the Cardia)	**Problem-based learning/ Case scenario** Students are encouraged to recognize the abnormality in ECG and interpret the changes related to Congestive Cardiac failure, Cardiac arrest, and Conductive disorders of the Cardia. Suitable planning of treatment is also studied. Refer to the steps mentioned in NLHT 6.5
Non Lecture Hour Practical		

S.No	Name of Practical	Description of Practical Activity
NLHP 6.1	Cardio Pulmonary Resuscitation (CPR) Description	**Workshop -** Hands on training program on CPR (Utilisation of 8 NLHP)) Preferable occasion shall be WORLD HEART DAY (If not possible, any convenient time in the given term must be utilised). • Students are made into small groups and sent to the simulation laboratory. • A pre-test analysis of students' knowledge on CPR is done by sharing a questionnaire to each student. • Demonstrator demonstrates the procedure of CPR on the mannequin. • Each student shall perform the CPR technique on the mannequin. • Student's skill evaluation is done by the mentor through any suitable assessment method like following OSPE stations. • A post-test analysis of students' knowledge on CPR is done by sharing a questionnaire to each student and compared with pre-test scores. • Remedial measures are suggested if needed.
NLHP 6.2	Short cases presentation in Rasa pradoshaja vikara	• Case taking, documentation and presentation of **short clinical cases** from any of the Rasa Pradoshaja Vikara, selected from the OPD of Kayachikitsa of the attached treatment hospital. • 2 short cases = 2 NLHP per batch • Type of cases to be selected: • Pandu Roga (Any variety), Hridroga, Hritshoola, Madatyaya, Uchcha raktachapa, Bhrama. • Requirement: Students must document and demonstrate a minimum of **2 short cases** per clinical batch in their clinical diary/ clinical observation book. Later short cases may be chosen from the list to document in the case record. • Refer the short case framework as in NLHP 5.1
NLHP 6.3	Long cases presentation in Rasapradoshaja vikara	• Case taking, documentation and presentation of **Long clinical cases** from any of the Rasa Pradoshaja Vikara, selected from the IPD of Kayachikitsa of the attached treatment hospital. (**3 Long cases = 6 NLHP per batch)** • Type of cases: Any variety of Pandu Roga, Aamavata, Hridroga, Hritshoola, Madatyaya

		• Requirement: Students must document and demonstrate a minimum of **3 Long cases** per clinical batch in their clinical diary/ clinical observation book. Later long cases may be chosen from the list to document into the case record. • Refer the Long case framework as mentioned in NLHP 3.1

Topic 7 Chikitsa of Rakta pradoshaja vikara (LH :22 NLHT: 11 NLHP: 18)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO3	Explain the Chikitsa sutra of Rakta Pradoshaja vikara. Differentiate the Samprapti vighatana, Chikitsa sutra and chikitsa of Koshthashrita Kaamala with Shakhashrita Kaamala. **(SM41, SM42, SM43)**	CC	MK	K	L&PPT ,REC	T-OBT,VV-Viva	F&S	II	-	LH
CO1, CO3	Design a treatment algorithm for Koshthashrita Kaamala and Shakhashrita Kaamala as per the stages of Shadkriyakala. Describe the Chikitsa of Kumbha Kaamala, Halimaka (laaghavaka, alasa)	CS	MK	KH	L&PPT ,L,DIS	T-OBT,VV-Viva,P-VIVA	F&S	II	-	LH
CO1, CO3	Construct a Chikitsa yojana including the Pathyaapathya in Koshthashrita Kaamala & Shakhashrita Kaamala and state the Phalashruti, Aushadha sevana kala, Matra, Anupana of the Aushadha yoga in Kaamala roga. • Vasaguduchyadi kashaya • Patoladi kvatha • Yakrutplihari lauha • Arogayavardhini vati • Drakshavalehya • Mahatiktaka ghrita • Triphala kashaya	CAP	MK	KH	L&PPT	VV-Viva,T-OBT,WP	F&S	II	-	LH

CO1, CO2, CO6	Discuss the etiopathogenesis, diagnosis, principles of management of Yakrut shotha (Infective and Non-Infective Hepatitis)	CC	DK	K	PBL,L&GD,CBL	WP,VV-Viva,P-VIVA,QZ	F&S	II	-	NLHT7.1
CO1, CO2, CO6	Discuss the etiopathogenesis, diagnosis, and principles of management of Yakrutdalyodara/ Yakrutadhitantrujah (Liver cirrhosis) .	CC	DK	K	L&PPT	QZ ,VV-Viva	F&S	II	-	LH
CO1, CO2, CO6	Discuss the etio-pathogenesis, diagnosis and principles of management of Madyaatirek-janya yakrut-vikara (Alcoholic Fatty Liver Disease), Madyetar karana-janya yakrut-vikara (Non-Alcoholic Fatty Liver Disease -NAFLD) and Madyetar vasamaya-janya yakrut-shotha (Non-Alcoholic Steato-hepatitis -NASH).	CC	DK	K	CD,PER,PBL	QZ ,PUZ,WP	F&S	II	-	NLHT7.2
CO2, CO6	Describe the etiopathogenesis, diagnosis and principles of management of Yakrut koshakiya arbuda (Hepato cellular Carcinoma)	CC	DK	K	L&PPT	P-VIVA,VV-Viva	F&S	II	-	LH
CO1, CO3	Elaborate the Samprapti vighatana, Chikitsa sutra, Chikitsa and Pathyaapathya of Raktapitta and design a treatment algorithm for Raktapitta **(SL81)** according to the stages of Shadkriyakala .	CC	MK	KH	L&PPT	VV-Viva,QZ	F&S	II	-	LH
CO1, CO3	Construct a Chikitsa yojana including the Pathyaapathya in Vividha margagata Raktapitta	CAP	MK	KH	L&PPT	VV-Viva,P-VIVA	F&S	II	-	LH
CO1, CO3	State the Phalashruti, Aushadha sevana kala, Matra, Anupana of the Aushadha yoga in Raktapitta. • Vasa putapaka swarasa • Bolabaddha rasa • Lodhrasava • Vasaguduchyadi kashaya • Chandrakala rasa • Vasa ghrita	CK	MK	K	L&PPT	VV-Viva,T-OBT,QZ ,P-VIVA	F&S	II	-	LH

CO2, CO6	Discuss the etiopathogenesis, diagnosis, and principles of management of Raktaskandana sambandhi vikara (Coagulation disorders) and Vanshanugata adhiraktasrava pravrutti (Hereditary - Haemophilia)	CC	NK	K	PER,DIS	QZ ,VV-Viva,CL-PR	F	II	-	NLHT7.3
CO2, CO6	Discuss the etiopathogenesis, diagnosis and treatment of Uparjit ghanasra kosha nyunata (Acquired- Immune thrombocytopenia -ITP), Vyapak antah siradhamani raktaskandata (Disseminated Intravascular Coagulation -DIC)	CC	NK	K	PER,DIS	VV-Viva,QZ ,CL-PR	F	II	-	NLHT7.4
CO1, CO3	Explain the Samprapti vighatana, Avastha anusara (Uttana Gambheera) Chikitsa sutra of Vatarakta **(SP14)**	CC	MK	K	L&PPT ,REC	S-LAQ,P-VIVA,VV-Viva	F&S	II	-	LH
CO1, CO3	Design a treatment algorithm stating Samanya and Doshanusara chikitsa in Vatarakta according to Shadkriyakala.	CS	MK	KH	REC,L &PPT	P-VIVA,T-OBT,S-LAQ,VV-Viva,QZ	F&S	II	-	LH
CO1, CO3	Construct a Chikitsa yojana along with Pathyaapathya for Vatarakta	CAP	MK	KH	REC,L &PPT	QZ ,T-OBT ,P-VIVA,VV-Viva	F&S	II	-	LH
CO1, CO3	State the Phalashruti, Aushadha sevana kala, Matra, Anupana for the Aushadha yoga in Vatarakta • Kaishora guggulu • Amruta guggulu • Gruhadhumadi pralepa • Madhuyashtyadi taila • Pinda taila • Kokilakshadi kvatha	CK	MK	K	REC,L &PPT	VV-Viva,QZ	F&S	II	-	LH

CO1, CO2, CO6	Discuss the various clinical presentations of Gout and discuss the etiopathogenesis, diagnosis and principles of management of Gouty arthritis in parlance with Vatarakta.	CC	DK	KH	L&GD, DIS,PER,SDL	M-POS,VV-Viva	F&S	II	-	NLHT7.5
CO1, CO2, CO6	Describe the etiopathogenesis, diagnosis, principles of management of Parisariya sira dhamaniya vikara (Peripheral vascular disorders).	CC	NK	K	L&PPT	VV-Viva	F	II	-	LH
CO1, CO2, CO3	Illustrate the various Parisariya sira dhamaniya vikara (Peripheral vascular disorders).	CAP	NK	KH	BS,TPW,PER,TBL,DIS	M-CHT,VV-Viva,M-MOD	F	II	-	NLHT7.6
CO1, CO2, CO3	Explain the Samprapti vighatana, Samanya chikitsa and Vegakaleena chikitsa of Mada, Murchha and Sanyasa (SQ22, SP98).	CC	DK	K	L&PPT	VV-Viva	F	II	-	LH
CO1, CO3	Explain the Samprapti vighatana, Chikitsa sutra, Chikitsa of Visarpa.Design a treatment algorithm for it according to the stages of Shadkriyakala.Appraise the applicable Shadvidhopakrama in the Chikitsa of Visarpa (SN4T)	CC	MK	K	L&PPT,REC	T-OBT,VV-Viva,S-LAQ	F&S	II	-	LH
CO1, CO3	Construct a Chikitsa yojana along with Aushadha yoga and Pathyapathya in Visarpa.State the Phalashruti, Sevana kala, Matra, Anupana of the following Aushadha yoga in Visarpa • Mahatiktaka kashaya • Pravala pishti • Tiktaka ghrita • Amrutadi kvatha/kashaya • Shirisha lepa • Manjishthadi kashaya	CAP	MK	KH	L&PPT	T-OBT,VV-Viva,T-CS	F&S	II	-	LH

CO1, CO2, CO6	Discuss the various clinical presentations of Visarpa (Shingles, Erysipelas) along with their management.	CC	NK	K	PER,SDL,TBL, DIS	M-CHT,VV-Viva,M-POS	F	II	-	NLHT7.7
CO1, CO3	Explain the Samprapti vighatana, Chikitsa sutra, Samanya chikitsa and design a treatment algorithm for Kushtha and Kilasa according to the stages of Shadkriyakala (SN40, SN43, SN46, SN48, SN49, SN4A, SN4B SN4D, SN4P, SN4U)	CC	MK	K	REC,L &PPT	S-LAQ,VV-Viva	F&S	II	-	LH
CO1, CO3	Appraise the concept of repeated Shodhana and Bahirparimarjana Chikitsa in Kushtha. Outline the applicable Doshopakrama in Doshanusara chikitsa of Kushtha roga	CE	MK	KH	L&PPT	P-VIVA,CR-W,T-OBT,VV-Viva	F&S	II	-	LH
CO1, CO3	Construct a Chikitsa yojana with Pathyaapathya, Naimittika rasayana in Kushtha and Kilasa and state the Phalashruti, Aushadha sevana kala, Matra, Anupana of the Aushadha yoga in Kushtha • Patolamooladi kashaya • Khadirarishta • Madhusnuhi rasayana • Gandhaka rasayana • Panchatikta ghrita guggulu • Avalgujadi lepa • Marichadi Taila • Rasamanikya • Arogyavardhini vati • Tuvaraka rasayana	CAP	MK	KH	L&PPT	QZ ,VV-Viva,T-OBT, P-VIVA,T-CS	F&S	II	-	LH
CO1,	Compare the different types of Kshudra and Mahakushtha and	CAN	DK	KH	PER,TB	WP,P-POS,	F&S	II	-	NLHT7.8

CO3	discuss their treatment modalities.				L,SDL, PL,DIS	M-CHT,M-POS				
CO1, CO3	Compare the similarities and differences in the treatment of Sheetapitta, Udarda, Kota, Utkota, (SN4K, SN4L) construct a Chikitsa yojana (treatment plan) including the Pathyaapathya for these diseases and state the Phalashruti, Aushadha sevana kala, Matra, Anupana of the following Aushadha yoga- • Haridra khanda • Ardraka khanda • Eladi tailam • Eladi gana churna	CAN	MK	KH	L&PPT ,L	VV-Viva,T-CS	F&S	II	-	LH
CO1, CO2, CO6	Explain the etiopathogenesis, diagnosis, principles of management of Tvak vikara (Common dermatological conditions in clinical practice).	CC	DK	K	L&PPT	QZ ,PUZ,VV-Viva	F	II	-	LH
CO1, CO2, CO6	Review case reports from indexed journals on Tvak vikara.	CK	DK	K	DIS,IBL ,PER,SDL,PL	CR-RED	F	II	-	NLHT7.9
CO1, CO2, CO6	Discuss the diagnosis and treatment of the Tvak vikara - Tvak anurjatiya vikara (Allergic disorders of the skin, Atopic dermatitis-Eczyma, Urticaria), Shalkayukta tvak vikara (Squamous lesions) - Psoriasis, Shewalikabha tvak vikara (Lichen planus), Visphota (Bullous lesion), Udasphotanvika tvak vikara (Pemphigus and Pemphigoid lesions), Kavkad tvak vikara (mycotic skin diseases).	CC	DK	K	PER,TPW,PL,TBL,L&GD	PUZ,VV-Viva,QZ ,M-POS	F	II	-	NLHT7.10
CO1, CO2, CO6	Discuss the treatment of Galit Kushtha (leprosy), Shvitra (Vitiligo/ Leukoderma)	CC	MK	KH	TBL,PL ,D,DIS, PER	QZ ,VV-Viva	F&S	II	-	NLHT7.11

CO1, CO3	Explain the Samprapti vighatana and Chikitsa of Daha according to its types. Construct a Chikitsa yojana incorporating the applicable Doshopakrama and Pathyaapathya in Daha and state the Phalashruti, Aushadha sevana kala, Matra, Anupana of the Aushadha yoga in Daha • Mukta- shukti pishti • Guduchyadi Kashaya • Kamadudha rasa • Chinchadi lehya	CC	DK	K	L,L&PPT	VV-Viva	F&S	II	-	LH
CO1, CO2, CO3, CO6, CO7	Sketch a rational treatment prescription for the diagnosed case of Rakta Pradoshaja vikara.	PSY-GUD	MK	SH	PSM,LRI,CD, D-BED, CBL	P-EXAM,RK,P-REC,OSCE,P-VIVA	F&S	II	-	NLHP7.1
CO1, CO2, CO3, CO6, CO7	Design a Chikitsa yojana on demonstration of a clinical case of Rakta Pradoshaja Vikara	PSY-GUD	MK	SH	CBL,CD,PER, D-BED, LRI	OSCE,PM, DOPS,DOPS,VV-Viva	F&S	II	-	NLHP7.2
CO7	Associate with the purpose of commemorating the day of medical importance.	AFT-VAL	NK	K	FV	Log book	F&S	II	-	NLHP7.3

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 7.1	A diagnostic and treatment approach to Yakrut shotha w.s.r to Infective and Non-Infective	An approach to a patient presenting with peeta varnata, with an insight into Yakrut shotha (Hepatitis) and its management through case scenarios, Liver Function Test, and imaging techniques

	Hepatitis.	interpretations. • **Activity to be done**: **Case Scenario/Problem based learning** • The mentor introduces the approach to diagnosis using clinical features. • The students are divided into small groups. • The mentor gives a case scenario with LFT and/or USG reports to each group of students. • The students discuss the problem within their small groups and get ready for a presentation based on their interpretation. • The mentor guides each group through the approach of diagnosis and planning of the treatment after their presentation. • The mentor gives concluding remarks.
NLHT 7.2	An Insight into Yakrut vikara (common liver disorders) and their management	**Case Scenario/ Problem based learning** An approach to a patient with a diagnosis of Yakrut vikara and its management; learning the art of diagnosis and treatment through case scenarios and investigations interpretations. Refer the framework as mentioned in NLHT 7.1
NLHT 7.3	Disorders of Coagulation	**Oral presentation using Audio visual aids.** The students are selected to make an audio visual presentation on the etiopathogenesis, diagnosis, and principles of management of Raktaskanda sambandhi vikara (Coagulation disorders) and Vanshanugata adhiraktasrava pravrutti (Hereditary - Haemophilia). Refer to the description of the activity as in NLHT 6.2
NLHT 7.4	Acquired disorders of coagulation	**Oral presentation using Audio visual aids.** The selected students shall make an audio visual presentation on the etiopathogenesis, diagnosis and principles of management of Acquired- Immune thrombocytopenia and Disseminated Intravascular Coagulation which will be followed by a discussion. Refer the framework as in NLHT 6. 2

NLHT 7.5	Maladies and remedies of Gout with special reference to Vatarakta	P**resentation of e-posters/ posters** The students gain an insight into the various manifestations and clinical presentations of Gout including Gouty arthritis. A correlative study is made with special reference to Vatarakta (**SP14)** through the activity of e-poster/ poster presentations. Refer the framework as in NLHT 6.1
NLHT 7.6	Management of peripheral vascular disorders	**Brain storming and Making of Charts/ Models on Peripheral vascular disorders** An attempt will be made by the students to understand various Peripheral vascular disorders and their management. Students shall present their ideas through making of Charts/ models. • The mentor divides the students into small groups and instructs them to refer tutorials, library resources, reading materials on the given topic. • The students ponder on their ideas related to the topic. • The student groups are instructed to present their knowledge and ideas on the clinical aspects including treatment modalities of Peripheral vascular diseases by preparing charts/ models. • The mentor encourages the activity and gives concluding remarks.
NLHT 7.7	Contemporary understanding of Visarpa along with its management	P**resentation of e-posters/posters/charts** The students gain an insight into the clinical presentation of Shingles, Erysipelas through the activity of e-poster/ poster presentations/ Charts. Refer the framework as in NLHT 6.1
NLHT 7.8	Kushtha bheda and doshahara chikitsa	**E-Poster presentation** Comparison of the different types of Kshudra and Mahakushtha with their treatment descriptions using the principles of Doshopakrama. Refer, as mentioned in NLHT6.1
NLHT 7.9	Article review on Tvak vikara	**Journal reading and presentation**

		The students are expected to select and present case reports/ research articles/ review articles on Tvak vikara from peer reviewed indexed journals. • Students are divided into small groups. • Each group is directed to utilise library resourses and search for peer reviewed indexed journals to find a case report/ research article/ review article published on Tvak vikara. • Each team presents one article during the class hour. • The mentor teaches the students how to review a scientific/research article. • The mentor summarises the presentations and concludes with remarks.
NLHT 7.10	Diagnosis and treatment of Tvak vikara (Common Dermatological conditions in clinical practice)	**Photography presentation** Comparison of the different types of Tvak vikara with their treatment descriptions - Tvak anurjatiya vikara (Allergic disorders of the skin, Atopic dermatitis-Eczyma, Urticaria), Shalkayukta tvak vikara (Squamous lesions) - Psoriasis, Shewalikabha twak vikara (Lichen planus), Visphota (Bullous lesion), Udasphotanvika tvak vikara (Pemphigus and Pemphigoid lesions), Kavkad tvak vikara (mycotic skin diseases) • The students are divided into small groups and instructed to click photographs of available types of Tvak vikara in the attached hospital; after taking informed consent of patients and following clinical ethics guidelines. • The students present their prepared material during an allotted class hour. • The mentor supervises the photograph presentations made by the students. • The mentor evaluates the presentations made by the various teams of students. • The mentor concludes the activity with remarks on the topic and activity
NLHT 7.11	Diagnosis and treatment of Leprosy and Vitiligo/Leukoderma	**Oral presentation using Audio visual aids** Few students are selected to make an oral presentation using audio visual aids on the diagnosis and treatment of Leprosy and Vitiligo/ Leukoderma. Refer framework as in NLHT 6.2

Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 7.1	Short cases presentation in Rakta Pradoshaja Vikara	**Short Case taking** Case taking, documentation, and presentation of **short clinical cases** from any of the Rakta pradoshaja vikara, selected from the OPD of Kayachikitsa of the attached treatment hospital. (2 short cases = 2 NLHP per batch) Type of cases- Koshthashrita Kamala/ Nasagata raktapitta/ Uttana Vatarakta/ Gambhira vatarakta/ Siraja granthi/ Sheetapitta/ Udarda/ Kota/ Kushtha (any variety)/ Kilasa/ Visarpa (any variety) Requirement: Students must document and demonstrate a minimum of **two Short cases** per clinical batch in their clinical diary/ clinical observation book. Short cases may be chosen from this list to document into the case record. Refer short case framework as mentioned in NLHP 5.1
NLHP 7.2	Long cases presentation in Rakta Pradoshaja Vikara	**Long clinical case taking**: Case taking, documentation and presentation of **Long clinical cases** from any of the Rakta pradoshaja vikara, selected from the IPD of Kayachikitsa of the attached treatment hospital. (5 Long cases = 10 NLHP per batch)) Type of cases to be selected - Koshthashrita Kamala/ Shakhashrita Kamala/ Haleemaka/ Kumbha Kamala/ Raktapitta (any marga)/ Uttana Vatarakta/ Gambhira Vatarakta/ Sheetapitta/ Kushtha (any variety)/ Visarpa (any variety). Requirement: Students must document and demonstrate a minimum of 5 Long cases per clinical batch in their clinical diary/ clinical observation book. Cases may be chosen from the list to document in the case record. Refer the long case framework as mentioned in NLHP 3.1
NLHP 7.3	Commemoration of day of medical importance	**Public awareness program:** Commemoration of World Liver Day **OR** World Hepatitis Day by a public awareness activity. (If not, any convenient time in the given term can be utilised).

		Utilization of 6 NLHP hours Organize an **outreach activity** for public awareness - Awareness and sensitization resource talk along with a medical camp for the local population involving the students in the activity.

Topic 8 Chikitsa of Kshudra roga (LH :2 NLHT: 1 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO2, CO3, CO6	Identifying the following Kshudra roga and explain their treatment :Yavaprakhya (SN5Y), Andhalaji (SN5Y), Vivritta (SN5Y), Kacchapika(SN9Y), Indravriddha, Gardabhi, Jalagardabha (SM0Y), Irivellika (SN5Y), Gandhanama (SN5Y), Kaksha (SN4T), Visphotaka (SN4P), Agnirohini, Vidarika (SP9Y), Sharkararbuda (SP71), Pama (SN46), Vicharchika (SN43), Rakasa (SN40), Padadari, Alasa (SN48), Masurika, Tilkalaka (SN4E), Masaka (SN4H), Nyaccha (SN5Y), Vyanga (SN4G), Nilika (SN41)	CC	DK	KH	L&PPT ,L_VC	QZ ,VV-Viva	F&S	III	-	LH
CO1, CO2, CO3, CO6	Identifying the following Kshudra roga and explain their treatment :Ajagallika (SN5Y), Valmika (SN5Y), Panasika, Pashanagardabha (SM1D), Chippa, Kunakha (SN6Y), Anushayi (SP9Y), Kadara (SN9Y), Indralupta (SN90), Darunaka (SN91), Arumshika (SN70), Palitya, Yuvanpidika (SN4V), Padminikantaka (SN5Y), Jatumani (SN4F), Charmakeela, Parivaritika (SN0A), Avapatika, Niruddhaprakasha (SN0A), Sannirudhaguda (SM5Y), Ahiputana (SN5Y), Vrishanakacchu (SN40) & Gudabhramsha (SM55).	CK	NK	K	L&PPT ,L_VC	VV-Viva,QZ	F	III	H-SH,H-KB	LH
CO1, CO2, CO3, CO6	Recognize the Kshudra roga and describe its Chikitsa	CK	DK	K	SDL	M-POS,QZ ,VV-Viva, M-CHT	F	III	-	NLHT8.1

CO1, CO2, CO3, CO6, CO7	Demonstrate a short case on Kshudra roga and write an OPD prescription of the diagnosed case.	PSY-SET	DK	SH	CBL	VV-Viva,P-CASE	F	III	-	NLHP8.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 8.1	Photography competition to familiarize the students with diagnosis and treatment of Kshudra roga.	Self-Directed Learning • The mentor announces the photography competition on Kshudra roga. • Students are asked to take the photograph of cases of Kshudra roga patients after seeking written consent of patient and following guidelines of clinical ethics. • Students compile the photograph and prepare chart/poster specifying the diagnosis and treatment of the photographed case. • Students display their chart/poster on the day of competition. • Mentor declares the winner.

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 8.1	Clinical case study on Kshudra roga.	Case Based Learning(2 NLHP) Refer the case taking framework as described in NLHP 4.1

Topic 9 Chikitsa of Mamsapradoshaja and Medopradoshaja vikara (LH :8 NLHT: 2 NLHP: 8)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO3	Describe the Samanya chikitsa of Mamsapradoshaja vikara (SR52) and Medopradoshaja vikara (SR53) and explain the Vishesha chikitsa of Gandamala (SL08) and Galaganda (SL0Y) with its types	CK	MK	K	L,L&PPT	QZ ,PRN,CL-PR	F&S	III	-	LH
CO1, CO3	Summarize the etipathogenesis, diagnosis and principles of management of Galaganda (Goitre) (SL0Y) and state the Phalashruti, Matra, Anupana, and Sevana kala of the following Yoga • Kanchanara guggulu • Tiktaka ghrita • Mahatikta ghrita • Amritadi taila • Hamsapathyadi kashaya	CC	DK	K	L&PPT,L	PRN,QZ	F	III	-	LH
CO1, CO3	Explain the Samprapti vighatana, Chikitsa sutra, Chikitsa of Arbuda(SP72).and Apachi	CC	DK	K	L&PPT,L	QZ ,PRN	F&S	III	-	LH
CO1, CO3	Review the etiopathogenesis, diagnosis, principles of management and ayurvedic perspective of neoplasm and discuss the undesirable(untoward) effects of radiotherapy & chemotherapy in cancer management with the role of ayurvedic management as supportive/adjuvant therapy based on principles of Anukta roga chikitsa	CC	NK	K	L_VC,L&PPT,L	PRN,QZ	F	III	-	LH
CO1, CO3	Develop the Samprapti vighatana, Chikitsa sutra, Chikitsa, and Pathyaapathya for Shosha (SP2Y) and Karshya (SP61)	CS	MK	KH	L_VC,L,L&PPT	QZ ,PRN	F&S	III	-	LH

CO1, CO3	Describe Samprapti vighatana, Chikitsa sutra, Chikitsa yojana along with Pathyaapathya of Sthoulya	CC	MK	K	L,L&PPT ,L_VC	QZ ,PRN	F&S	III	-	LH
CO1, CO3	Explain Samprapti vighatana, Chikitsa sutra and Chikitsa yojana along with Pathyaapathya of Prameha (SM8D) and design a treatment algorithm for Prameha according to its stages of Shadkriyakala	CC	MK	K	L&PPT ,L_VC, L	QZ ,PRN	F&S	III	-	LH
CO1, CO3	Plan the treatment according to the status of Ojus in Madhumeha and discuss the etiopathogenesis, diagnosis,principles of management of Diabetes mellitus (SP60)	CS	MK	KH	L&PPT ,L_VC, L	PRN,QZ ,CL-PR	F&S	III	-	LH
CO1, CO3	State the Phalashruti, Matra, Anupana, and Sevana kala of Aushadha yoga in Sthoulya (SP64) and Prameha	CK	DK	KH	DIS,REC,L&GD,PER, TBL	CL-PR,O-QZ,PRN,QZ	F&S	III	-	NLHT9.1
CO1, CO2, CO3	Discuss the etiopathogenesis, diagnosis and principles of management of Medapachaya (Dyslipidaemia) (SP62) and Sthoulya (obesity)(SP64)	CC	NK	KH	PER,DIS,BL,L&GD	PRN,QZ	F	III	-	NLHT9.2
CO1, CO3, CO5	Demonstrate the Chikitsa yojana & prepare case record in cases of given Mamsavaha and Medovaha srotas vikara after performing relevant clinical examination	PSY-MEC	MK	KH	LRI,D-BED,CBL,PBL ,PT	PP-Practical,OSCE,PRN,VV-Viva ,P-VIVA	F&S	III	-	NLHP9.1
CO1, CO3, CO5	Commemoration of International days	PSY-MEC	NK	KH	DIS,RLE,KL,BS,RP	PRN,INT	F	III	-	NLHP9.2

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity

NLHT 9.1	Presenting the Phalashruti, Matra, Anupana and Sevana kala of Aushadha yoga for Sthoulya and Prameha	**Group Discussion and Team based learning** The students are divided in groups of 3-5 students • Each Group is allotted Aushada yogas from the given yoga • Navaka guggulu • .Vidangadi lauha, • .Shiva gutika • Ayaskriti • Trimurti rasa • Nishakatakadhi kashayam • Chandraprabha vati, • Vasant Kusumakar rasa • Phalatrikadhi kasayam(Prameha adhikara) • .Asanadi kashayam • Students refer and compile the material from library sources and prepare a presentation • Each group will present the allotted topic in class • Students will be encouraged to interact with the presenter under the supervision of the mentor • Mentor gives concluding remarks on the topic
NLHT 9.2	Detailed understanding of dyslipidemia and Obesity and its ayurvedic management	**Blended learning** • Students are given online learning material like description of the internet links and scientific articles • Students are divided into various small groups, and they will be allotted topic related dyslipidemia and Obesity • Mentor gives an introduction to the topic as a set induction • Each group is asked to do a presentation related to the topic given • Group discussion will be followed • Mentor answers the queries raised by students • Mentor gives concluding remarks on the presentations

Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 9.1	Bedside case taking of of Galaganda / Gandamala /Sthoulya / Karshya/ Prameha	Interpretation of the blood, and imaging reports of patients in IP related mamsa- medovaha srotas and its avasthika chikitsa. Students are asked to take cases in the IPD **(5 Hours**) (2 long casesX2 hours = 4 hours) each batch and one other activity **Demonstration Bedside** Refer case taking framework as described in NLHP3.1 use for details **Group Discussion/Class Presentation(1 Hour)** • The students are divided in groups of 3-5 students • Each group is allotted topics related to blood, urine examination and imaging reports in specific disease related to mamsa- medovaha Srotas • they will go through various sources and prepare a presentation. • Each group will present its presentation in class. • Other students will be free to ask the questions and presenting team will answer queries. • Group discussion will be proceeded • Mentor gives concluding remarks.
NLHP 9.2	Public awareness activity related to World cancer day / Obesity Day/Diabetes Day	World cancer day / Obesity Day/Diabetes Day (Any one)**(3 hours)** **Kinesthetic learning**-The students are asked to make posters on various aspect of the illness and do an exhibition of the same for the public OR **Role play**-The students are encouraged to perform a role play depicting the importance of prevention of these diseases and swift action on witnessing the early symptoms. OR **Public outreach program**-Conduct a survey among the public to assess the susceptibility of cancer/ Obesity /Diabetes and educate them about the same. OR Organize a rally to create awareness about Prevention OR conduct medical camps for these disease Prepare a report with a Geotagged photograph

Topic 10 Shuddha-Ashuddha chikitsa, Chikitsajanita vikara (LH :1 NLHT: 2 NLHP: 2)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO1, CO2, CO3	Paraphrase Shuddha - Ashuddha chikitsa & Explain Iatrogenic Disease	CC	MK	KH	L&PPT ,PER	VV-Viva,COM,T-OBT,Log book	F&S	III	-	LH
CO1, CO2, CO3	Develop a protocol for the general principles of Drug administration to prevent Iatrogenic DiseasesAssess the benefits of Shuddha chikitsa & ill effects of Ashuddha chikitsa	CS	DK	KH	PBL,DIS,SIM, BS,IBL	P-CASE,PRN,P-EXAM,DEB,P-VIVA	F	III	-	NLHT10.1
CO1, CO2, CO3	Integrate the treatment protocol of Drug induced Iatrogenic Disease in the given case	AFT-SET	MK	SH	SDL,D-M,SIM, LRI,CBL	WP,P-EN,P-VIVA,P-CASE,SP	F&S	III	-	NLHP10.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 10.1	Identifying the occurrence of Iatrogenic Disease & assessment of the benefits of Shuddha chikitsa & ill effects of Ashuddha chikitsa	Students demonstrate in a blended learning the occurrence of Iatrogenic disease in the given simulation & Students are able to understand the knowledge of Shuddha & Ashuddha chikitsa through a debate. 2 activities x 1 hour each = 2 hours • The students are given a brief introduction by the Mentor about Shuddha & Ashuddha chikitsa • The mentor assigns a simulation based scenario to students to demonstrate the occurrence of Iatrogenic disease • Student collects information from different sources and discusses on the given topic. • The Mentor encourages the other students in the classroom for framing the guidelines for prevention & treatment of iatrogenic diseases

		• The mentor divides the students into two groups allotting benefits of Shuddha chikitsa & ill effects of Ashuddha chikitsa to respective groups • Each group is instructed to search study material on the given topic, students discuss and debate their respective topics • Post debate, the mentor evaluates the points presented during debate by the students. • The Mentor discusses aspects of Shuddha-ashuddha chikitsa and gives concluding remarks.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 10.1	Chikitsa yojana for Drug induced Iatrogenic Disease	Student will be able to plan a Chikitsa yojana in the given case of Drug induced Iatrogenic Disease. Case based learning - 2 Short cases x 1 hour = 2hours per batch The Mentor takes students to the ward/OPD of Kayachikitsa & assigns a case of Ashuddha chikitsajanya Iatrogenic disease. Mentor shows the art of writing a rational treatment prescription and documenting it in the following steps: • The students shall introduce self to the patient and take verbal consent. • The students shall interrogate the patient and document the clinical history. • The students further brief the patient about the steps in examination that will be performed on him/her. • The students perform the relevant clinical examinations adopting the Ayurvedic and conventional clinical methods of examination of the involved system • The available investigation reports are interpreted by the students. • The students interpret the collected information and state the vyadhi nama (arrive at a tentative clinical diagnosis) following the method of vyavachedaka nidana (differential diagnosis) • The students determine the sadhyaasadhyata (prognosis) of the disease in the patient. • The students formulate a rational treatment prescription for the diagnosed disease & plan the nidan parivarjan for the drug induced disease . • The students recommend pathyaapathya to the patient. • Finally, the students address the doubts of the patient & acknowledge his/her cooperation in

		the case taking. • The students present and discuss the documented short case. • The mentor facilitates the case presentation. • The mentor evaluates the student's performance, knowledge, psychomotor and communication skills using rubrics or checklist and gives the feedback. • Remedial measures should be implemented if found necessary.

Paper 2 (Vyadhi Vishesha Chikitsa - 2)

A3 Course out come	B3 Learning Objective (At the end of the session, the students should be able to)	C3 Domain/sub	D3 MK / DK / NK	E3 Level	F3 T-L method	G3 Assessment	H3 Assessment Type	I3 Term	K3 Integration	L3 Type
Topic 11 Chikitsa of Vatavyadhi (LH :16 NLHT: 6 NLHP: 26)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO1, CO3	Detail the Chikitsa sutra, Chikitsa, and role of Sneha sweda in Nirupastambhita Vatavyadhi.	CC	MK	K	L&PPT	VV-Viva,T-CS	F&S	I	-	LH
CO1, CO3	Describe the Chikitsa and the role of Shodhana in Upastambhita vata.	CC	MK	K	L&PPT	T-CS,S-LAQ,VV-Viva	F&S	I	-	LH
CO1, CO3	Summarize the Samprapti Vighatana, Chikitsa sutra & Chikitsa of Akshepaka vyadhi	CC	MK	K	L&PPT	VV-Viva,T-CS	F&S	I	-	LH
CO1, CO3	• Describe the Samprapti vighatana, Chikitsasutra of snayugata vata • Construct Chiktsayojana including Rasayana and Pathyaapathya of Snayugatavata	CAP	MK	KH	L&PPT	VV-Viva,T-CS	F&S	I	-	LH

CO1, CO3, CO4	Explain the Samprapti vighatana, Chikitsa sutra, Chikitsa of Pakshaghata(SK22)	CC	MK	KH	L&PPT	VV-Viva,T-CS	F&S	I	-	LH
CO1, CO3, CO4	Explore the Chikitsa Yojana including Rasayana & Pathyaapathya of Ekangavata, Sarvanga vata &Sarvanga roga	CAP	MK	KH	L&PPT	CBA,T-CS, S-LAQ,T-OBT	F&S	I	-	LH
CO1, CO3	Describe the Samprapti vighatana , Chikitsa sutra and chikitsa of Jihwastambha	CC	MK	KH	L&PPT	T-OBT,VV-Viva,T-CS	F&S	I	-	LH
CO1, CO2, CO3, CO4	Detail the Samprapti Vighatana, Chikitsa sutra and Chikitsa of Ardita (Bell's Palsy) and Construct chikitsa yojana including Rasayana & Pathyaapathya	CAP	MK	KH	L&PPT	T-CS,T-OBT,VV-Viva	F&S	I	-	LH
CO1, CO3	Express the Samprapti Vighatana, Chikitsa sutra & Chikitsa of Manyastambha	CC	MK	K	L&PPT	T-CS,VV-Viva,T-OBT	F&S	I	-	LH
CO1, CO3	Describe Samprapti vighatana, Chikitsa sutra, Chikitsa, of Vishwachi(SK51)	CC	MK	K	L&PPT	T-OBT,T-CS,VV-Viva	F&S	I	-	LH
CO1, CO3	Explain Samprapti vighatana, Chikitsa sutra, and Chikitsa of Avabahuka(SK15)	CC	MK	K	L&PPT	VV-Viva,T-CS,T-OBT	F&S	I	-	LH
CO1, CO2, CO3, CO4	Describe the Etiopathogenesis,Diagnosis , Samprapti Vighatana, Chikitsa sutra, Chikitsa of Gridhrasi (Sciatica)(SP20) and Construct the Chikitsayojana including Rasayana and Pathyaapathya.	CAP	MK	KH	L&PPT	T-CS,T-OBT,VV-Viva	F&S	I	-	LH
CO1, CO3,	Derive Samprapti vighatana, Chikitsa sutra ,Chikitsa of Khanja (SK2Y) ,Kalaya khanja Pangu(SK21) and Construct Chikitsa	CAP	MK	KH	L&PPT	T-CS,VV-Viva	F&S	I	-	LH

CO4	yojana including Rasayana & Pathyapathya.									
CO1, CO3, CO4	Explain Samprapti vighatana, Chikitsa sutra, Chikitsa of Padadaha (SK51) and Padaharsha(SK54) and Construct Chikitsa yojana including Rasayana & Pathyapathya.	CAP	MK	K	L&PPT	T-CS,VV-Viva,T-OBT	F&S	I	-	LH
CO1, CO3	Outline Samprapti vighatana, Chikitsa sutra ,Chikitsa of Kaphavruta vata, Medogatavata and Medoavruta vata	CK	DK	K	L&PPT	T-CS,T-OBT	F&S	I	-	LH
CO1, CO2, CO3	Elaborate the Etiopathogenesis, Diagnosis and Ayurvedic Perspective including principles of Managemnet of Parisareeya nadi shotha(Peripheral Neuropathy)	CC	DK	K	L&PPT ,L_VC	T-OBT,T-CS,VV-Viva	F&S	I	-	LH
CO1, CO3	Discuss Samprapti vighatana, Chikitsa sutra & Chikitsa of Urustambha(SP 46)	CC	MK	K	REC,SY ,BS,IBL ,DIS	T-CS,VV-Viva,T-OBT	F&S	I	-	NLHT11.1
CO1, CO3, CO4	Discuss the Samprapti Vighatana, Chikitsasutra and Chikitsa of Udavarta(SM35) & Construct the Chikitsayojana including Rasayana and Pathyaapathya	CAP	MK	K	TBL,IBL,LS,PSM,DIS	SA,VV-Viva,QZ ,T-CS,CL-PR	F&S	I	-	NLHT11.2
CO1, CO2, CO3	Summarize the Etiopathogenesis, Diagnosis, and Ayurvedic perspective and principles of Management of Guillain- Barre Lakshana samuchchaya (Guillain- Barre syndrome), Ajnavaha nadikosha vikara (Motor Neuron Disease), Anuprasthiya-sitamajjachadda -shotha (Transverse Myelitis), Peshi dourbalya (Myasthenia Gravis)	CC	DK	K	EDU,FC,DIS	T-CS,T-OBT,VV-Viva	F&S	I	-	NLHT11.3
CO1, CO2, CO3	Differentiate between the various types of Strokes and apply the treatment principles of Vatavyadhi and Pakshaghata in its management	CC	MK	K	CBL,SDL,EDU,FC,TBL	T-OBT,T-CS,VV-Viva	F&S	I	-	NLHT11.4
CO1, CO2, CO3	Discuss the Chikitsa sutra of Gata vata	CC	MK	K	PER,DIS	T-OBT,VV-Viva	F&S	I	-	NLHT11.5

CO1, CO3, CO4	Sketch the importance of Antahparimarjana and Bahirparimarjana chikitsa in Vata vyadhi	CAP	MK	KH	TPW,PBL,DIS	VV-Viva,C-INT,PUZ, QZ	F&S	I	-	NLHT11.6
CO1, CO2, CO3, CO6, CO7	Demonstrate the Chikitsa yojana & prepare case record in cases of Vatavyadhi after performing relevant contemporary and Ayurveda clinical examination.	PSY-MEC	MK	SH	D-BED	CBA,C-INT,VV-Viva, INT,OSCE	F&S	I	-	NLHP11.1
CO1, CO3	Select the Matra, Sevana kala and Anupana in various clinical condition of Vatavyadhi (Any 10-yoga mentioned in Vatavyadhi adhikara of classical texts)	AFT-RES	DK	KH	D-BED, CBL,SDL,IBL,DA	QZ ,O-QZ, VV-Viva	F&S	I	-	NLHP11.2
CO1, CO2, CO3, CO6, CO7	Assess the importance of commemorating International Day on Stroke	AFT-RES	NK	SH	RLE,EDU,RP	DEB,QZ	F	I	-	NLHP11.3
CO1, CO2, CO3, CO5, CO6, CO7	Assess the importance of commemorating International Day on Arthritis	AFT-RES	NK	SH	EDU,D	QZ	F	I	-	NLHP11.4

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 11.1	Symposium on Urustambha	Symposium

		• The entire class is divided into a small group • Each group is allotted various aspects of Urustambha and its management like NIdana, Samprapti, Contemporary diagnostic approach, Treatment principle, Dravya chikitsa, and Adravya chikitsa • One person from each group is asked to do a presentation • Followed by a group discussion • Faculty moderate the Discussion and a senior faculty gives concluding remarks • Evaluation is done using quiz.
NLHT 11.2	Understanding of Udavarta and its application	Team-based learning and Library Session • Initially, the mentor gives a basic introduction to Udavarta • Each team is asked to analyze the role of Udavarta in Various systems like Neurology, gastroenterology, Ophthalmology, Psychiatry, Anorectal conditions, Respiratory disorders • To gather information, they are given a Library session • Each team does a presentation on their respective topic • Followed by Discussion and Quiz
NLHT 11.3	Detailed understanding of Guillain- Barre Lakshana samuchchaya (Guillain -Barre syndrome),Ajna Nadi Vikara (Motor Neuron Disease),,Anuprasthiyasitamajjachadda shotha (Transverse Myelitis),Peshi dourbalya (Myasthenia Gravis)	Flipped classroom • The topic is given and they are asked to prepare notes on etiopathogenesis, ayurvedic perspective, and management from medical books and online scientific articles(shared by mentor) • The next day the students are divided into groups and engage in group discussions. • Mentors facilitate the discussion and students are encouraged to ask questions • Mentors give answers to the queries • Evaluation is done by Quiz and Presentation
NLHT 11.4	Understanding of Cerebrovascular Accident and its management	Blended learning

		• Students are given online learning material (video link) and scientific articles • Students are divided into various small groups and they will be allotted topics related to CVA such as Circle of Willis, Ischemic stroke, Hemorrhagic Stroke, Stroke with Aphasia, and Cranial nerve lesions associated with stroke. • Mentor gives an introduction about the topic as a set induction. • Each group is asked to do a presentation related to the given topic. • The presentation is followed by a group discussion • The Mentor clarify the doubts. • Assessment is done using a quiz
NLHT 11.5	Gata vata Chikitsa	Class Presentation • Small groups of students are allotted different topics on gata vata • Student groups are asked to do a Presentation on their topic • Followed by a discussion on the Utility of gatavata chikitsa and its Clinical application • Evaluation is done using a quiz
NLHT 11.6	Chikitsa yojana in Vatavyadhi	Problem based learning • Students are divided into groups • Each group is given a case scenario • Group members discuss the problem and formulate a treatment protocol with special reference to Antahparimarjana and Bahirparimarjana Chikitsa and its rationale. • The mentor clarifies the doubts and modifies the protocol if needed • Evaluation is done using a quiz
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 11.1	Bedside casetaking of Pakshagatha, Ardita,	Refer Activity description 3.1 (total 16hrs)

	Avabahuka/Viswachi,Kampavata, Gridhrasi, Manyasthmba,Khanja/ Pangu, Padadaha/ Padaharsha	
NLHP 11.2	Selection of appropriate Aushadhi in Vatavyadhi	PBL & Real-life Experience (2hours) Students go through the IP Case sheet and OP prescription and interact with the patient and assess the Vyadhyavastha and follow up with the patient. • Students are divided into groups and each group is assigned two or three Yoga from the given list. Gandharvahastadi kashaya Ashtavargam kashaya Dhanadanayanaadi kashaya Sahacharaadi kashaya Prasarinyaadi kashaya Trayodashanga guggulu Mahayogaraja guggulu Rasna guggulu , Shaddharana choorna Ekangaveera rasa Bruhat vata chintamani rasa Bala taila Prasarinyaadi tailam Karapasasthyaadi taila, Vishagarbha taila Karpooradi taila Ksheerabala taila Dhanwantaram taila (avarti) Mahamasha taila

		• They do a project based on the respective Yoga . • They visit the Hospital dispensary to get acquainted with the medicine. • Followed by a class presentation. • The teacher answers the queries raised by the students on various aspects of drug administration. • The Evaluation is done using a quiz.
NLHP 11.3	Commemoration of World Stroke Day	Role play/Making of posters/Real life experience The students are asked to make posters on various aspects of the illness and do an exhibition of the same OR The students are encouraged to perform a role-play depicting the importance of prevention of disease using the ayurvedic principles and swift action on witnessing the early symptoms. OR Survey the public to assess the susceptibility of Stroke and educate them about the same. OR Conduct a rally to create awareness about Prevention/ conduct a medical camp Prepare a report with a Geotagged Photograph At the end, the students will be analyzed using a quiz,
NLHP 11.4	Commemoration of World arthritis day	(4hrs) The students are asked to make posters on various aspects of the illness and do an exhibition of the same OR The students are encouraged to perform role-play that depicts the importance of disease prevention using Ayurvedic principles and swift action when witnessing early symptoms. OR Survey the public to assess the susceptibility of Arthritis and educate them about the same. OR

		Conduct a rally to create awareness about Prevention/ conduct a medical camp Prepare a report with a Geotagged Photograph At the end, the students will be analyzed using a quiz.

Topic 12 Chikitsa of Asthi-Majja pradoshaja vikara (SR54) (SR55) (LH :8 NLHT: 4 NLHP: 11)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO3, CO4	• Express the Chikitsa sutra of Asthivaha and Majjavaha srotodushti and Asthi kshaya. • Construct the Chikitsayojana including Rasayana and Pathyaapathya of Asthisoushirya	CS	MK	KH	REC,L &PPT	S-LAQ,SA, T-CS,T-OBT	F&S	II	-	LH
CO1, CO3, CO4	Compile the Samprapti vighatana, Chikitsa Sutra & Chikitsa of Sandhigata vata (SP12) and Construct a Chikitsa yojana including Rasayana and Pathyapathya	CS	MK	KH	REC,L &PPT	T-OBT,T-CS,VV-Viva	F&S	II	-	LH
CO1, CO2, CO3, CO4	• Explain the Samprapti Vighatana, Chikitsa sutra, and Chikitsa Yojana, including the Rasayana and Pathyaapathya of Vatakantaka(SP4Y). • Summarize the Etiopathogenesis, Diagnosis, and	CC	MK	KH	L&PPT	QZ ,T-CS,T-OBT,S-LAQ,CL-PR	F&S	II	-	LH

	Ayurvedic Perspective of Plantar fasciitis/Calcaneal Spur									
CO1, CO3, CO4	Explore the Samprapti vighatana, Chikitsa sutra & Chikitsa of Kateegraha(SP42) andConstruct a Chikitsa yojana including Rasayana and Pathyapathya	CAN	MK	KH	L&PPT	T-CS,VV-Viva	F&S	II	-	LH
CO1, CO2, CO3	Describe the Samprapti vighatana Chikitsa sutra & Chikitsa of Greevagraha(SP45) andGenerate the Chikitsa yojana including Rasayana and Pathyaapathya	CS	MK	KH	L&PPT	T-CS,VV-Viva	F&S	II	-	LH
CO1, CO3, CO4	Explore the Samprapti vighatana Chikitsa sutra & Chikitsa of Kroshtuka sheersha andDevelop the Chikitsa yojana including Rasayana and Pathyaapathya	CS	MK	KH	L&PPT	VV-Viva,T-CS	F&S	II	-	LH
CO1, CO2, CO3, CO4	Describe the Etiopathogenesis, Diagnosis, Ayurvedic perspective and Principles of management of Osteoporosis(SP00) and Osteopenia	CC	DK	KH	L&PPT	VV-Viva,T-CS,T-OBT	F&S	II	-	LH
CO1, CO2, CO3, CO4	Detail the Etiopathogenesis, Diagnosis, Ayurvedic perspective and Principles of management ofRaktaheenatajanya dhatunasha(AvascularNecrosis)	CC	DK	KH	L&PPT	T-OBT,T-CS,VV-Viva	F&S	II	-	LH
CO1, CO2, CO3, CO4	Consolidate the Etiopathogenesis, Diagnosis, Ayurvedic perspective, and Principles of management of Sandhi gatavata(Osteoarthritis(SP12)) and Construct a Chikitsa yojana based on Ayurvedic principles	CS	MK	KH	DIS,IBL,FC	T-OBT,T-CS,VV-Viva	F&S	II	-	NLHT12.1
CO1, CO2, CO3	Summarize the Etiopathogenesis, Diagnosis, Ayurvedic perspective and Principles of management of Kasheruka vyadhi(Spondylopathies) and Kateeshoola (Lumbago)	CC	DK	KH	TBL	T-OBT,VV-Viva	F	II	-	NLHT12.2

CO1, CO2, CO3, CO4	Construct the Chikitsa yojana based on the interpretation of various investigations utilized in the diagnosis of Asthimajjavaha srotodushti vikara	CAP	DK	K	TUT,X-Ray,DIS,IBL,LRI	QZ ,CL-PR,PUZ	F&S	II	-	NLHT12.3
CO1, CO2	Discuss the Etiopathogenesis, Diagnosis, Ayurvedic perspective and Management of Asthisankatarbuda(Osteosarcoma)	CC	DK	K	PER	CL-PR,QZ	F	II	-	NLHT12.4
CO1, CO2, CO3, CO6, CO7	Demonstrate the Chikitsa yojana including Rasayana and Pathyaapathya & prepare the case record of Asthivahasrothodushti vikara after performing a relevant clinical examination.	PSY-MEC	MK	SH	D-BED	QZ	F&S	II	-	NLHP12.1
CO1, CO2, CO3, CO4	Assess the importance of commemorating World Spinal Day.	AFT-RES	NK	SH	D	QZ	F	II	-	NLHP12.2

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 12.1	Discussion on the etiopathogenesis, Diagnosis and Management of Osteoarthritis	Flipped classroom The topic is given and they are asked to prepare notes on etiopathogenesis, ayurvedic perspective, and management from medical books and online scientific articles(shared by mentor) The next day the students are divided into groups and engage in group discussions. Mentors facilitate the discussion and students are encouraged to ask questions Mentors give answers to the queries Evaluation is done by Quiz and Presentation
NLHT 12.2	Detailed understanding of the Diagnosis, Clinical examination, ayurvedic perspective and	Team-based learning, Presentation The students are divided into different teams

	management of Lumbar spondylosis and Cervical Spondylosis	One team is asked to present a case on Lumbar spondylosis and Cervical Spondylosis The second team does a detailed presentation about the topic The third team performs a clinical examination in a simulated case The fourth team does a presentation on the investigations Followed by a group discussion on Ayurveda diagnosis and Management Mentors answer the queries and give feedback
NLHT 12.3	Ayurvedic management of Asthimajjavaha srotodushti vikara based on interpretation of Radiological Investigations	Tutorial A mentor gives a brief introduction about the various investigations advised in a clinical case of Asthi /Majja vikruti Students are encouraged to be involved in small group discussion Each group is given an X-ray, CT scan, or MRI film Students observe and interpret the radiological findings and plan the Ayurvedic Management accordingly. Discussion is followed
NLHT 12.4	Discussion on Asthisankatarbuda(Osteosarcoma)	Class Presentation The students are encouraged to collect information on the etiopathogenesis, Diagnosis, Investigations Prognosis and Management of Osteosarcoma The students do a presentation Discussion is followed The Mentor gives answers to the queries The Evaluation is done using a Quiz, Puzzle
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**

NLHP 12.1	Bedside case taking of 1.Sandhigata vata 2 Kateegraha 3.Greeva graha 4.Raktaheenatajanya dhatunasha(AvascularNecrosis)/ Kroshtuka sheersha/Asthikshaya	Refer the case-taking framework as detailed in the NLHP Activity 3.1 Total 8 hrs
NLHP 12.2	Commemoration of World spine day(Oct 16)	Inhouse OR Outreach activity(3hrs) The Students are encouraged to conduct public awareness programs using suitable mass communication, and audio-visual aids showing the importance of spinal health, Preventive and therapeutic aspect of spinal disorders.Public outreach activity can be conducted during the Syllabus teaching of asthimajjavaha sroto-dushti vikara

Topic 13 Chikitsa of Pranavaha Srotodushti Vikara (TM2:SL40-SL4Z) (LH :6 NLHT: 4 NLHP: 24)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO3	Describe Chikitsa Sutra of Pranavaha Srotodushti, Samprapti vighatana of Shwasa roga(SL42) & Hikka roga (SM74) with a treatment algorithm according to its stages of shadkriyakala and appropriate plan of Shadvidopkrama & Doshopakrama.	CE	MK	KH	L,L&GD,L&PPT	S-LAQ,VV-Viva,OSCE,CBA,P-VIVA	F&S	II	-	LH
CO1, CO3	Explain Chikitsa Sutra and Samprapti Vighatana of Kasa roga with a treatment algorithm according to its stages of Shadkriyakala and appropriate plan of Shadvidopkrama & Doshopkrama.	CE	MK	KH	L&GD, L&PPT ,L	S-LAQ,QZ ,P-VIVA,CBA,VV-Viva	F&S	II	-	LH
CO1, CO3	Explain Chikitsa sutra and Samprapti vighatana of Rajayakshma with a treatment algorithm according to its stages of Shadkriyakala, status of Ojus and appropriate plan of Doshopakrama.	CE	MK	KH	L,L&PPT ,L&GD	P-VIVA,CBA,P-CASE,M-POS,S-LAQ	F&S	II	-	LH

CO1, CO3	Define Chikitsa sutra and Samprapti vighatana of Urahkshat with a treatment algorithm according to its stages of Shadkriyakala and status of Ojus.	CE	MK	KH	L&PPT ,L,PSM, CBL,PE R	CBA,PRN, P-VIVA,C OM,M-POS	F&S	II	-	LH
CO2, CO6	Explain the Etiopathogenesis, Diagnosis & Principles of management and Ayurvedic perspective of Tamaka shwas(Bronchial Asthma) (SL40), Jirna shwasakrichchhanika (ChronicObstructive Pulmonary Disease), Vispharah (Bronchiectasis).	CC	DK	KH	CBL,L &GD,L S,DIS,L	T-CS,COM ,M-POS,SB A,PRN	F&S	II	-	LH
CO1, CO2, CO3	Explain the Etiopathogenesis, Diagnosis, Principles of management, and Ayurvedic perspective of Antaraaleeya Phuphphusa Vikara (Interstitial lung Disease), Phuphphusa arbuda (Lung Cancer), Phuphphusaasruti(Pleural effusion)	CC	NK	KH	FC,SDL ,L_VC, L&GD, D	CBA,VV-V iva,S-LAQ, P-VIVA,O SCE	F&S	II	-	LH
CO1, CO3, CO4	Construct a chikitsa yojana (treatment plan) of Shwasa (SL42)& Hikka (SM74)	CS	MK	KH	PSM,PB L,FC,P ER,BS	S-LAQ,CB A,QZ ,VV-Viva,P-VIVA	F&S	II	-	NLHT13.1
CO1, CO3, CO4	Formulate Chikitsa yojana (treatment plan) of Kaasa Roga (SL41)	CS	MK	KH	FC,L& GD,CB L,BS,P ER	P-VIVA,C BA,RK,Mi ni-CEX,S-LAQ	F&S	II	-	NLHT13.2
CO1, CO3, CO4	Sketch Chikitsa-yojana (treatment plan) of Trirupa , Shadrupa, Ekadasha rupa Rajyakshama , Anuloma Kshaya & Pratiloma Kshaya	CS	MK	KH	FC,BS, PER,SD L,CBL	VV-Viva,M ini-CEX,P-VIVA,PRN ,S-LAQ	F&S	II	-	NLHT13.3
CO1, CO3, CO4	Construct Chikitsa yojana (treatment plan) of Urahkshat roga.	CS	MK	KH	PER,L& GD,BS, FC,CBL	VV-Viva,P RN,COM,S -LAQ,P-	F&S	II	-	NLHT13.4

						VIVA				
CO1, CO2, CO3, CO6, CO7	Demonstrate clinical examination to diagnose & prognosticate , write treatment & prepare case record in a case of Mahashwasa, Urdhwa shwasa, Chhinna Shwasa, Kshudra Shwasa.	PSY-GUD	MK	SH	CBL,CD,X-Ray,D-BED,LRI	Mini-CEX, CBA,VV-Viva,P-VIVA ,OSCE	F&S	II	-	NLHP13.1
CO1, CO2, CO3, CO6, CO7	Perform clinical examination to diagnose & prognosticate, write treatment & prepare case record in a case of Kaasa Roga (SL41)	PSY-GUD	MK	SH	CBL,CD,X-Ray,D-BED	P-VIVA,RK,VV-Viva ,CBA,CHK	F&S	II	-	NLHP13.2
CO1, CO2, CO3, CO6, CO7	Demonstrate clinical examination to diagnose & prognosticate , write treatment & prepare case record in a case of Tamaka Shwasa (SL42)	PSY-MEC	MK	SH	CBL,CD,D-BED,LRI, X-Ray	P-VIVA,COM,QZ ,P-CASE,VV-Viva	F&S	II	-	NLHP13.3
CO1, CO2, CO3, CO6, CO7	Perform clinical examination to diagnose & prognosticate , write treatment & prepare case record in a case of Rajayakshma (~Pulmonary Tuberculosis)	PSY-GUD	MK	SH	X-Ray, CBL,CD,D-BED,LRI	QZ ,P-CASE,VV-Viva, OSCE,COM	F&S	II	-	NLHP13.4
CO1, CO2, CO3, CO6, CO7	Conduct clinical examination to diagnose & prognosticate , write treatment & prepare case record in a case of Jirna Shwasakrichchhanika (Chronic Obstructive Pulmonary Disease)	PSY-GUD	MK	KH	LRI,D-BED,X-Ray,CBL,CD	P-VIVA,RK,VV-Viva ,Mini-CEX,OSCE	F&S	II	-	NLHP13.5
CO1, CO2,	Perform clinical examination to diagnose & prognosticate, write treatment & prepare case record in a case of Vispharah	PSY-MEC	DK	SH	CD,CBL,D-BE	QZ ,Mini-CEX,COM,O	F&S	II	-	NLHP13.6

CO3, CO6, CO7	(Bronchiectasis)				D,X-Ray,LRI	SCE,P-VIVA				
CO1, CO2, CO3, CO6, CO7	Practice clinical examination to diagnose & prognosticate, write treatment & prepare case record in a case of Phuphphusaasruti (Pleural effusion)	PSY-GUD	DK	SH	CBL,CD,X-Ray,LRI,D-BED	VV-Viva,COM,QZ ,CL-PR,OSCE	F&S	II	-	NLHP13.7
CO1, CO2, CO3, CO6, CO7	Perform clinical examination to diagnose & prognosticate, write treatment & prepare case record in a case of Antaraalayi Phuphphusa Vikara (Interstitial Lung Disease)	PSY-MEC	NK	KH	CD,CBL,X-Ray,D-BED,LRI	CL-PR,QZ ,RK,VV-Viva,Mini-CEX	F	II	-	NLHP13.8
CO1, CO2, CO3, CO5, CO6, CO7	Describe the working of DOTs Centre	CC	MK	KH	FV	RK,CL-PR, VV-Viva,P-VIVA,PRN	F&S	II	-	NLHP13.9
CO1, CO2, CO5	Practice nebulization and administer oxygen therapy	PSY-GUD	MK	SH	CBL,D, D-BED, TUT	CBA,VV-Viva,SP,P-RP,DOPS	F&S	II	-	NLHP13.10

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 13.1	Chikitsa yojana (treatment plan) of Shwasa (SL42)& Hikka (SM74) by	**Lecture with group discussion** The teacher lays down ground rules of discussion and delivers a primer lecture to introduce the topic and points to be discussed during the course of discussion by putting up open ended questions and

encouraging students to share meaningful thoughts and ideas.
If discussion is lingering on one talking point, the teacher intervenes by putting up a new dimension / idea for discussion by asking questions.
At the end of the discussion the teacher summarises the important concepts & ideas.
Teacher may use powerpoint slides to navigate the discussion)

Brainstorming:

The teacher sets up a context of brainstorming and explains the process of brainstorming and defines a clear objective and expected outcome from the session. The students are divided into teams.
After students are divided, the teacher appoints facilitator(s) for the whole process.
Ground rules are set for the process in consultation with facilitators and a time limit is set for the whole process.
All the teams work separately and then capture all possible ideas. After all the ideas have been captured, it's time to discuss them. The team needs to be productive in choosing a creative idea that suits the problem, or they can try combining a few ideas to come up with a holistic solution. To make decisions as a group and come to an agreement, teams can use the voting method. Team leaders capture all ideas and presents before the whole class.

Case Based learning

Case-based Learning is an inquiry-based approach to learning medicine through clinical case scenarios in a collaborative small group setting.
The teacher divides class into small groups and a case history/ case study to each group
The students thoroughly go through the case history/case study and available supplementary material.
While going through case study students annotate the parts of the case that they feel are the most relevant. They can also use a highlighter or a pen to highlight, underline or circle important pieces of information.
The students sum up the essence of the case/case study and summarise it.

Flipped Classroom

It is implemented in three steps
Pre-class learning :Teacher assigns readings, videos, podcasts and other available materials which students go through on themself. After going through these students are required to respond to a series of quizzes or simple questions based on the concept discussed. The teacher can ask the students to post their own questions and attempt to answer other ones on a shared online platform.

In class activities :Within the classroom, students check with the teacher whether they have truly understood the subject through activities that require the skills they have acquired to develop. The students work together in small groups to analyze a problem, come up with their own solution, and evaluate other possible courses of action.
Post class reinforcement : Then students go to the OPDs/IPDs to experience/ learn in a real world scenario.
Presentation
The class is divided in groups of 3-5 students
Each student is allotted a specific component of the topic to go through from various sources and prepare a presentation.
Each group gives its presentation in class .
Other students ask the questions and the presenting team answers queries.
Teacher makes a concluding remark after each presentation including following points

- Assessment for suitability (yogya- ayogya) for

a. Shodhana Chikitsa
b. Shamana Chikitsa

- Aushadha yojna for shamana chikitsa :

A. Ekala Aushadha Yoga (single drug therapy) for Shwasa & Hikka with appropriate anupana: 1. Kushmanda shifa churna 2. Pippali churna 3. Shuddha Gandhaka 4. Bharangi kvatha 5. Kanaka(Dhattura Phala) Dhoomrasaayana
B. Aushadha Kalpas with appropriate sevana kala matra, anupana of the following Aushadh yoga in Shwasa & Hikka : 1. Shwashara Mahakashaya & Hikkanigrahana Mahakashaya 2. Bharangi- Nagara Kwatha 3. Gojihwadi kwatha 4. Shwasa Kutara rasa 5. Shringarabhra rasa 6. Shwasa Kasa Chintamani rasa

		C. Naimittika Rasayan for Shwasa & Hikka D. Pathyaapathya
NLHT 13.2	Chikitsa yojana (treatment plan) of Kaasa Roga (SL41)	For Details refer NHLT 13.1 • Asessement for suitability (yogya- ayogya) for a. Shodhana Chikitsa b. Shamana Chikitsa • Aushadha yojna for shaman chikitsa : A. Ekala Aushadha (Single Drug) Yoga with appropriate anupana: 1. Shringavera (Ardraka) swarasa 2. Kantakari Kwatha 3. Bibhitaka Churna 4. Vasa swarasa 5. Maricha Churna B. Ausadha Kalpa Prayog with appropriate matra, anupana , sevana kala :1. Kasahara Mahakashaya 2. Bharangi- Nagara Kwatha 3. Gojihwaadi kwath 4. Chandramrita rasa 5. Naardeeya Laxmivilaas rasa 6. Aanada bhairava rasa 7. Sitopaladi Choorna 8. Taalishaadi churna 9. Chitraka Haritaki Avleha 10. Marichadi Gutika 11. Lavangadi gutika 12. Vyoshadi vati. C. Naimittika Rasayana for Kaasa roga. D. Pathyaapathya recommendation
NLHT 13.3	Chikitsa yojana (treatment plan) of or Trirupa , Shadrupa, Ekadasha rupa rajyakshama , Anuloma kshaya & Pratiloma kshaya	**Refer NHLT13.1** • Asessement for suitability (yogya- ayogya) for

		a. Shodhana chikitsa b. Shamana chikitsa • Aushadha yojana for Shaman chikitsa : A. Ekala aushadha yoga with appropriate anupana: 1. Nagbala Churna 2. Kakjangha Churna 3. Laksha Churna 4. Vasa Panchanga 5. Haritaki Churna 6. Pippali churna. B.Aushadha Kalpa prayoga with appropriate matra, anupana , sevana kala for following : 1. Balya Mahakashaya 2. Brinhaneeya Mahakashaya 3. Trailokya chintamani rasa 4. Loknath rasa 5. Swarnabhupati rasa 6. Hemgarbha pottali rasa 7. Yavani Shadav Churna 8. Pippali vardhmana rasayana 9. Vaasa Avleha 10. Drakshasava C. Naimittika Rasaayana for Rajayakshma & Shosha D. Pathyaapathya recommendation for Raajyakshma & Shosha
NLHT 13.4	Construct Chikitsa yojana (treatment plan) of Urahkshat roga.	**For details refer NHLT13.1** • Asessement for suitability (yogya- ayogya) for a. Shodhana Chikitsa b. Shamana Chikitsa • Aushadha yojna for shaman chikitsa : A. Ekala Aushadha Yoga with appropriate anupana:1. Laksha Churna 2. Nagbala Kalpa 2. Brahmi Kalpa 3. Madhuyashti Kalpa 4. Nagar Kalpa 5. Laja churna B.Aushadha Kalpa prayoga with appropriate matra, anupana , sevana kala for following1. Elaadi

		gutika 2. Amritpraash Avleha 3. Ajaamaamsa Rasaayan C. Naimittika Rasayana for Kshata-ksheena/Urahkshat D. Pathya -Apathya Recommendation for Urahkshata
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 13.1	Bedside demonstration of a case of Mahashwasa, Urdhwa shwasa, Chhinna Shwasa, Kshudra Shwasa. (Any one case)	Refer the case taking framework as described in NHLP 3.1 (2 hours)
NLHP 13.2	Bedside case demonstration of case of Kaasa Roga (SL41)	Refer the case taking framework as described in NHLP 3.1 (2 hours)
NLHP 13.3	Bedside demonstration of case of Tamaka Shwasa (SL42)	Refer the case taking framework as described in NHLP 3.1
NLHP 13.4	Bedside case demonstration of a case of Rajayakshma (~Pulmonary Tuberculosis) (2 hours)	Refer NHLP 3.1
NLHP 13.5	Bedside demonstration of a case of Jirna Shwasakrichchhanika (ChronicObstructive Pulmonary Disease)	Refer the case taking framework as described in NHLP 3.1 (2 hours)
NLHP 13.6	Bedside demonstration of case of Vispharah (Bronchiectasis)	Refer the case taking framework as described in NHLP 3.1 (2hours)
NLHP 13.7	Bedside Case demonstration of case of Phuphphusaasruti (Pleural effusion)	Refer the case taking framework as described in NHLP 3.1 (2 hours)

NLHP 13.8	Bedside demonstration of case of Antaraalayi Phuphphusa Vikara (Interstitial Lung Disease)	Refer the case taking framework as described in NHLP 3.1 (2 hours)
NLHP 13.9	Field visit to DOTs Centre	The students will visit with mentor to nearest DOTs centre and understand the four pillars of NTEP (Revised National TB Eradication Program) 1. Detect 2. Treat 3. Prevent 4. Build (6 hours)
NLHP 13.10	Demonstration of Nebulization & oxygen therapy (2 hours)	**Nebulization** The nebulizers should be used according to manufacture's instructions The mentor will demonstrate the basic steps to set up and use nebulizer are as follows: • To Wash hands. • To Connect the hose to an air compressor. • To Fill the medicine cup with your medicine. • To avoid spills, close the medicine cup tightly and always hold the mouthpiece straight up and down. • To attach the other end of the hose to the mouthpiece and medicine cup. • To turn on the nebulizer machine. • To place the mouthpiece in mouth. • To keep lips firmly around the mouthpiece so that all of the medicine goes into lungs. If using a facemask, to place it over the mouth and nose. • To breathe through mouth until all the medicine is used. (This takes 5 to 20 minutes, depending on the device and medicine used. If needed, use a nose clip) • To turn off the machine when done. • Wash the medicine cup and mouthpiece with water and air dry until next treatment.

To administer Oxygen therapy
The mentors will demonstrate

- Assesment of need of oxygen therapy (suspected or confirmed hypoxemia)
- Assess if high flow and low flow oxygen therapy is needed. (A prescription is required for oxygen therapy. The prescription should include the oxygen-delivery device, the flow rate, and the amount of oxygen to deliver)
- Set the target peripheral oxygen saturation (SpO2) (for most acutely ill patients is 94% to 98%.Patients with chronic obstructive pulmonary disease should have a target of 85% to 92%.)
- Set up the oxygen delivery system.
- Attach the oxygen flowmeter to the oxygen source. (Verify that the flowmeter is connected to oxygen, not air or another gas. Connecting the flowmeter to a gas other than oxygen can have fatal consequences.)
- Attach the humidifier to the oxygen flowmeter, if needed.
- Attach the oxygen delivery device (i.e., cannula, mask) via the oxygen tubing to the humidifier or directly to the oxygen flowmeter via the flowmeter adaptor.
- Adjust the oxygen flowmeter to the prescribed flow rate
- Position the oxygen delivery device on the patient's face and adjust the elastic headband (or behind-ear loops and under-chin lanyard of the cannula) to achieve a comfortably snug fit. Maintain enough slack on the oxygen tubing.
    - *Nasal cannula:* Ensure proper positioning of the cannula tips in the patient's nares. If the cannula tips are curved, ensure that they point downward.
    - *Simple face mask:* Ensure that the mask is over the patient's mouth and nose, forming a seal
    - *Partial rebreathing mask:* Ensure that the mask is over the patient's mouth and nose, forming a tight seal. Also ensure that the reservoir bag remains partially inflated on inspiration
    - *Non-rebreathing mask:* Ensure that the mask is over the patient's mouth and nose, forming a tight seal. Ensure that both one-way valves at the side ports are in place to maintain a full non-rebreather system. Also ensure that the reservoir bag remains partially inflated on inspiration

		◦ *Venturi mask:* Ensure that the mask is over the patient's mouth and nose, forming a tight seal, and that the appropriate port has been selected ◦ *Face tent:* Ensure that the tent fits under the patient's chin and over the mouth and nose ◦ Verify that the oxygen delivery device is functioning properly • HFNC OXYGEN THERAPY 1. Position the nasal cannula on the patient's face and adjust the head strap to achieve a comfortably snug fit . Follow the manufacturer's instructions for application. 2. Ensure proper positioning of the cannula tips in the patient's nares. If the cannula tips are curved, ensure that they point downward. 3. Maintain enough slack on the oxygen tubing. 4. Review the high-flow oxygen delivery device settings, use of humidifier and heater, and alarms with the respiratory therapist. 5. Verify that the oxygen delivery device is functioning properly. 6. Observe the oxygen delivery device frequently to ensure proper placement. Readjust as necessary. 7. Monitor the patient's vital signs and SpO2 level and when making changes in oxygen therapy. 8. Consider adding continuous SpO2 monitoring for patients newly placed on oxygen 9. Check the humidifier when taking vital signs. ◦ Low-flow oxygen therapy: Replace the humidifier when it is empty. ◦ High-flow oxygen therapy: Notify the respiratory therapist when it is almost empty. 10. Observe the skin of the patient's outer ears, back of the head, bridge of the nose, nares, and nasal mucous membranes for evidence of pressure injuries or drying.

Topic 14 Chikitsa of Udakavaha srotodushti vikara (LH :5 NLHT: 2 NLHP: 8)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1,	Appraise Chikitsa sutra and Samprapti vighatana of Trishna with	CE	MK	KH	L&GD,	QZ ,CBA,P	F&S	III	-	LH

CO3	a treatment algorithm according to its stages of Shadkriyakala and appropriate Chikitsa yojana of Trishna Roga.				L&PPT ,L	-VIVA,T-CS,VV-Viva				
CO1, CO3	Explain Chikitsa sutra and Samprapti vighatana of Shotha roga with a treatment algorithm according to its stages of Shadkriyakala and appropriate plan of Shadvidhopakrama & Doshopakrama.	CE	MK	KH	L&PPT ,L,L&GD	M-POS,CHK,QZ ,P-CASE,RK	F&S	III	-	LH
CO1, CO3	Describe Chikitsa sutra and Samprapti vighatana of Jalodara roga with a treatment algorithm according to its stages of Shadkriyakala and appropriate plan of Shadvidhopakrama & Doshopakrama.	CE	MK	KH	L&GD, L&PPT ,L	VV-Viva,S-LAQ,T-CS, CL-PR,M-CHT	F&S	III	-	LH
CO2, CO6	Explain the Etiopathogenesis, Diagnosis, Principles of management and Ayurvedic perspective of Ascites & Jaliyovidyutansh vaishamya (Fluid- electrolyte imbalance)	CC	NK	KH	L&PPT ,L&GD, L	PRN,CL-PR,OSCE,VV-Viva,P-VIVA	F	III	-	LH
CO1, CO3	Appraise Chikitsa sutra and Samprapti vighatana of Ekdesheeya roga with a treatment algorithm according to its stages of Shadkriyakala and appropriate plan of Shadvidhopakrama & Doshopakrama.	CE	DK	KH	L,L&GD,L&PPT	T-CS,QZ , CBA,COM, P-VIVA	F&S	III	-	LH
CO1, CO3, CO4	Construct Chikitsa yojana for Shotha roga.	CE	MK	KH	DIS,SDL,D,CBL,FC	VV-Viva,QZ ,S-LAQ,CHK ,CBA	F&S	III	-	NLHT14.1
CO1, CO3, CO4	Construct chikitsa yojana of Udar roga & Jalodara	CE	MK	KH	BS,CBL ,PER,FC,L&GD	Mini-CEX, P-VIVA,QZ , VV-Viva,CHK	F&S	III	-	NLHT14.2

CO1, CO2, CO3, CO6, CO7	Perform clinical examination to diagnose & prognosticate , write treatment & prepare case record in a case of Vatodar- Pittodara- Kaphodara- Dushyodara.	PSY-MEC	MK	SH	CD,D-BED,X-Ray,LRI, CBL	OSPE,VV-Viva,Mini-CEX,CBA, P-VIVA	F&S	III	-	NLHP14.1
CO1, CO2, CO3, CO6, CO7	Perform clinical examination to diagnose & prognosticate , write treatment & prepare case record in a case of Yakritodara & Pleehodara, Chhidrodara, Baddha gudodara.	PSY-MEC	MK	SH	CD,X-Ray,LRI, CBL,D-BED	CBA,RK,Mini-CEX,P-VIVA,QZ	F&S	III	-	NLHP14.2
CO1, CO2, CO3, CO6, CO7	Perform clinical examination to diagnose & prognosticate , write treatment & prepare case record in a case of Jalodara	PSY-MEC	MK	SH	LRI,X-Ray,CD ,CBL,D-BED	OSCE,VV-Viva,P-VIVA,CBA,Mini-CEX	F&S	III	-	NLHP14.3
CO1, CO3, CO4, CO6, CO7	Perform clinical examination to diagnose & prognosticate, write treatment & prepare case record in a case of Shotha roga .	PSY-MEC	MK	SH	CBL,D-BED,LRI,X-Ray,PT	Mini-CEX, VV-Viva,P-VIVA,RK, CBA	F&S	III	-	NLHP14.4

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 14.1	Constructing chikitsa yojana for Shotha roga	Refer the framework as described in NHLT 13.1 • Asesement for suitability (yogya- ayogya) for a. Shodhana Chikitsa

		b. Shamana Chikitsa • Aushadha yojna for shaman chikitsa :1. Bilva patra svaras 2. Punarnavamoola churna /Kwatha 3. Maankand Churna 4. Gudardraka Kalpa 5. Eranda taila A. Ekala Aushadha Yoga with appropriate anupana:1. Shothahar Mahakashaya 2. Gudardraka Yog 3. Punarnavashtaka Kwaatha 4. Kansa Hareetaki 5. Dashmoola haritaki 6. Punarnaavasava 7.Patoladi Kwaath 8. Punarnavaadi Guggulu 9. Punarnavaadi Madura B.Aushadha Kalpa prayoga with appropriate matra, anupana , sevana kala for following C. Naimittika Rasayana for Shotha roga D. Pathya -Apathya Recommendation for shotha roga
NLHT 14.2	Constructing Chikitsa yojana of Udar roga & Jalodara	Refer the framework as described in NHLT 13.1 • Assessment for suitability (yogya- ayogya) for a. Shodhana Chikitsa b. Shamana Chikitsa • Aushadha yojna for shaman chikitsa : A. Ekala Aushadha Yoga with appropriate anupana:1. Guggulu Kalpa 2. Haritaki Kalpa 3. Shilajatu Kalpa 4. Pippali Vardhmana Kalpa 5. Gomutra B.Aushadha Kalpa prayoga with appropriate matra, anupana , sevana kala for following:1. Arogayavardhini Vati 2. Jalodarari rasa 3. Ichchhabhedi rasa 4. Abhayadi Modaka 5. Sahasra hareetaki yog 6. Narayan Choorna 7. Narach Ghrita C. Naimittika Rasayana for for udara roga

		D. Pathya -Apathya Recommendation for udara roga

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 14.1	Bedside demonstration of a case of Vatodara- Pittodara- Kaphodara- Dushyodara	Refer the case taking framework as described in NHLP3.1 (2 hours)
NLHP 14.2	Bedside demonstration of case of Yakritodara & Pleehodara, Chhidrodara, Baddha gudodara.	Refer the case taking framework as described in NHLP3.1 (3 hours)
NLHP 14.3	Bedside demonstration of case of Jalodara	Refer the case taking framework as described in NHLP3.1 (2 hours)
NLHP 14.4	Bedside demonstration of case of Shotha roga	Refer the case taking framework as described in NHLP3.1 (2 hours)

Topic 15 Chikitsa of Mootravaha srotodushti vikara (LH :4 NLHT: 4 NLHP: 8)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO3, CO4	Describe Chikitsa sutra and Samprapti vighatana of Mootrakriccha roga with a treatment algorithm according to its stages of Shadkriyakala and appropriate plan of Shadvidhopakrama & Doshopakrama..	CE	MK	KH	L&GD, L&PPT ,L_VC	VV-Viva,P-VIVA,COM,QZ ,CBA	F&S	III	-	LH
CO1, CO3, CO4	Detail Chikitsa sutra and Samprapti vighatana of Mootraghat (SM81) with a treatment algorithm according to its stages of Shadkriyakala and appropriate plan of Shadvidhopakrama &	CE	MK	KH	L,L&PPT ,L&GD	S-LAQ,VV-Viva,COM ,QZ ,CBA	F&S	III	-	LH

	Doshopakrama									
CO1, CO3	Explain the Etiopathogenesis, Diagnosis, Principles of management and Ayurvedic perspective of Ashu Vrikka -nishkriyata (Acute Renal Failure) & Chirakaari vrikka -nishkriyata (Chronic Renal Failure)	CE	DK	KH	L,L&PPT ,L&GD	M-POS,P-VIVA,S-LAQ,VV-Viva,CBA	F&S	III	-	LH
CO1, CO3	Explain the Etiopathogenesis, Diagnosis, Principles of management and Ayurvedic perspective of Mutra Gaveenika shotha (UTI), Vrikka Koshika Shotha (Nephritis)(SM84), Pourusha Granthi Shotha (Prostitis), and Mutranalika- Basti shotha (Urethritis-Cystitis),	CC	MK	KH	L&PPT ,L,L&GD	T-CS,Mini-CEX,P-VIVA,M-POS ,S-LAQ	F&S	III	-	LH
CO1, CO3, CO4	Construct Chikitsa yojana for Samprapti vighatana of Mootrakrichchha roga (SM82)	CS	MK	KH	PER,SDL,PBL, L&GD, CBL	CBA,P-VIVA,VV-Viva,QZ ,S-LAQ	F&S	III	-	NLHT15.1
CO1, CO3, CO4	Construct Chikitsa yojana for Samprapti vighatana of Mootraghaata roga (SM81)	CS	DK	KH	L&PPT ,L&GD, L	CBA,S-LAQ,CHK,VV-Viva,QZ	F&S	III	H-SH	NLHT15.2
CO1, CO3, CO4	Construct Chikitsa yojana for Samprapti vighatana of Ashmari roga (SM82).	CS	MK	KH	FC,PER ,CBL,L &GD,BS	S-LAQ,P-VIVA,QZ , VV-Viva,CBA	F&S	III	-	NLHT15.3
CO1, CO3	Explain the Etiopathogenesis, Diagnosis, Principles of management and Ayurvedic perspective of Pourusha Granthi vriddhi (BPH) , Pourusha Granthi Arbuda (Ca Prostate) & Apavrukkatva (Nephrotic Syndrome)	CC	NK	KH	FC,BS, PER,CBL,L&GD	RK,QZ ,VV-Viva,CBA,P-VIVA	F	III	-	NLHT15.4
CO1, CO2,	Perform clinical examination to diagnose & prognosticate, write treatment & prepare case record in a case of Mootraghata.	PSY-MEC	MK	SH	LRI,D-BED,C	VV-Viva,QZ ,O	F&S	III	-	NLHP15.1

CO3, CO6, CO7					D,CBL, X-Ray	SCE,P-VIVA,RK				
CO1, CO2, CO3, CO6, CO7	Perform clinical examination to diagnose & prognosticate , write treatment & prepare case record in a case of Vrikka-nishkriyata (Chronic Kidney Disease)	PSY-MEC	MK	SH	CBL,LRI,D-BED,CD,X-Ray	CBA,VV-Viva,P-VIVA,OSCE,RK	F&S	III	-	NLHP15.2
CO1, CO2, CO3, CO6, CO7	Perform clinical examination to diagnose & prognosticate, write treatment & prepare case record in a case of Mootrakrichccha.	PSY-MEC	MK	SH	LRI,D-BED,CBL,X-Ray,CD	CBA,VV-Viva,COM,Mini-CEX,P-VIVA	F&S	III	-	NLHP15.3
CO1, CO2, CO5	Demonstrate Indwelling Urethral Catheter Insertion, manage problems due to Indwelling Catheters and remove Indwelling Urethral catheters.	PSY-GUD	MK	SH	SIM,SDL,D-BED,CD,X-Ray	DOPS,P-PS,SP,VV-Viva,Mini-CEX	F	III	H-SH	NLHP15.4

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 15.1	Constructing Chikitsa Yojana for Samprapti vighatana of Mootrakrichchha roga (SM82)	Refer the framework as described in NHLT 13.1 • Assessment for suitability (yogya- ayogya) for a. Shodhana Chikitsa b. Shamana Chikitsa

		• Aushadha yojna for shaman chikitsa : A. Ekala Aushadha Yoga with appropriate anupana:1. Gokshur kwaatha 2. Ela churna 3. Daruhaldi churna 4. Narikela Pushpa 5. Amalaki Kwatha B.Aushadha Kalpa prayoga with appropriate matra, anupana , sevana kala for following:1. Mootrarechaneeya Mahakashaya 2. Trinpanchmula Kashaya 3. Shatavaryadi Kashaya 4. Pashanbhedadi Choorna 5. Gokshuradi Guggulu 6. Chandanasava 7. Chandrakala rasa C. Naimittika Rasayana for Mootrakriccha D. Pathya -Apathya Recommendation for Mootrakrichchha.
NLHT 15.2	Constructing Chikitsa Yojana for Samprapti Vighatana of Mootraghaata roga (SM81)	Refer the framework as described in NHLT 13.1 • Assessment for suitability (yogya- ayogya) for a. Shodhana Chikitsa b. Shamana Chikitsa • Aushadha Yojna for Shaman Chikitsa : A. Ekala Aushadha Yoga with appropriate anupana: B.Aushadha Kalpa prayoga with appropriate matra, anupana , sevana kala for following C. Naimittika Rasayana for D. Pathyaapathya Recommendation for Mootraghata
NLHT 15.3	Constructing chikitsa yojana for samprapti vighatana of Ashmari roga (SM82)	Refer the framework as described in NHLT 13.1

		• Asesement for suitability (yogya- ayogya) for a. Shodhana Chikitsa b. Shamana Chikitsa • Aushadha yojna for shaman chikitsa : A. Ekala Aushadha Yoga with appropriate anupana:1. Varuna Kwaatha 2. Narikela Pushpa 3. Taalmooli churna 4. Yavakshar 5. Kulatttha yusha /kwatha B.Aushadha Kalpa prayoga with appropriate matra, anupana , sevana kala for following:1. Varunadi kashaya 2. Veertarvadi Kashaya 3. Shigrumooladi Kashaya 4. Trivikram rasa C. Naimittika Rasayana for Ashmari roga D. Pathyaapathya Recommendation for Ashmari roga
NLHT 15.4	Detailed understanding of management of Pourusha Granthi Vriddhi (BPH) , Pourusha Granthi Arbuda (Ca Prostate) & Apavrukkatva (Nephrotic Syndrome)	Refer the framework as described in NHLT 13.1 • Asesement for suitability (yogya- ayogya) for a. Shodhana Chikitsa b. Shamana Chikitsa • Aushadha yojna for shaman chikitsa : A. Ekala Aushadha Yoga with appropriate anupana. B.Aushadha Kalpa prayoga . C. Naimittika Rasayana D. Pathya -Apathya Recommendation

Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 15.1	Bedside demonstration of a case of Mootraghata	Refer the case taking framework as described in NHLP 3.1
NLHP 15.2	Bedside demonstration of a case of CKD	Refer the case taking framework as described in NHLP 3.1
NLHP 15.3	Bedside demonstration of a case of Mootrakrichcha	Refer the case taking framework as described in NHLP 3.1
NLHP 15.4	Bedside demonstration of indwelling Urethral Catheter Insertion, managing problems due to Indwelling Catheters and removing Indwelling Urethral catheters.	Mentor will demonstrate • Scope of practice.,Informed consent.Cultural safety. • Key consideration in decision to catheterise. • Key considerations in choice of indwelling catheter Equipment. • Infection prevention,Catheter care, Catheter bag emptying,Catheter bag Change,Urine Sampling for an Indwelling catheter. • Indwelling Urethral Catheter Insertion (Female & Male) Procedure. • Problem Management for Indwelling Catheters. • Decision to Remove Indwelling Urethral catheters, Potential problems During Removal of urethral catheter. • Complications and Monitoring Following Removal of Indwelling Urethral catheters. • The students will practice same under guidance of same through simulation models or patients.

Topic 16 Chikitsa of Purishavaha srotodushti vikara (SR5A) (LH :4 NLHT: 4 NLHP: 8)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**

CO1, CO3	Describe the treatment plan for Sama and Nirama stages of Atisara (SM37) and Explain Samanya chikitsa sutra and Chikitsa along with Pathyaapathya	CC	MK	KH	L&PPT ,L	PRN,QZ	F&S	III	-	LH
CO1, CO3	Explain the Samprapti vighatana, Chikitsa sutra and Chikitsa including Pathyaapathya of Pravahika (SM38) and Raktatisara	CC	DK	KH	L,L&PPT	PRN,QZ	F&S	III	-	LH
CO1, CO3	Summarize the Samprapti vighatana, Chikitsa sutra, Chikitsa and Pathyaapathya of Krimi roga(SQ50)	CC	MK	KH	L&PPT ,L	QZ ,PRN	F&S	III	-	LH
CO1, CO3	Detail the Samprapti vighatana, Chikitsa sutra and Chikitsa including Rasayana and Pathyaapathya of Arsha according to its types.	CC	MK	KH	L,L&PPT	PRN,CL-PR,QZ	F&S	III	H-SH	LH
CO1, CO3	State Phalashruti, Matra, Anupana and Sevana kala of Aushadha yoga mentioned in atisara and pravahika • Kutajaghana vati • Dadimashtaka choorna • Mustaarishtam • Bilwadhi leha • Gangadhara vati	CK	DK	KH	TBL,L&GD,DIS	QZ ,PRN	F&S	III	-	NLHT16.1
CO1, CO3, CO5	Discuss the etiopathogenesis, diagnosis, and principles of management of Pravahika (dysentery) ,Raktatisara (ulcerative colitis), Bruhadaantra arbuda (colorectal cancer)	CC	DK	KH	L_VC,TBL,PER ,L&GD	QZ ,O-QZ,PRN	F&S	III	-	NLHT16.2
CO1, CO3	State Phalashruti, mention the Matra, Anupana and Sevana kala of Yoga mentioned in various classical text for Krimi roga • Krimikuthara rasa • Krimighna vati	CK	DK	KH	REC,TBL,DIS,L&GD	PRN,QZ	F&S	III	-	NLHT16.3

	• Nimbamrita kashaya • Vidangarishtam									
CO1, CO3	Describe the Phalashruti, Matra, Anupana and Sevana kala of commonly used Yoga in Arsha • Arshakuthara rasa • Kankayana vati • Abhayarishta • Takrarishta (Arshaadhikara)	CC	DK	KH	TBL,DIS,L&GD,REC	O-QZ,PRN,QZ	F&S	III	-	NLHT16.4
CO1, CO3, CO5	Demonstrate the chikitsa yojana & prepare case record in cases of Pureeshavaha sroto vikara after performing relevant clinical examination	PSY-MEC	MK	SH	DIS,LRI,L&GD,TBL,PER	PRN,VV-Viva,PP-Practical,P-PRF,OSCE	F&S	III	-	NLHP16.1
CO1, CO5	Commemoration of International days	PSY-MEC	NK	SH	RLE,PER,PBL,TBL,RP	P-POS,P-PS,P-RP,QZ	F	III	-	NLHP16.2

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 16.1	Presenting the Phalashruti, Matra, Anupana and Sevana kala of Aushadha yoga for Atisara and Pravahika	**Group Discussion and Team based learning** • The students are divided in groups of 3-5 students • Each Group is allotted specific Aushadha yoga • Students refer and compile the material from library sources and prepare a presentation

		• Each group will present the allotted topic in class • Students are encouraged to interact with the presenter under the supervision of the mentor • Mentor clears the doubts, answers the queries and gives the concluding remarks
NLHT 16.2	Detailed understanding of Pravahika (dysentery), Raktatisara (ulcerative colitis), Bruhadantra arbuda (colorectal cancer) and its ayurvedic management	**Team based learning** • The students are divided into different teams • One team is asked to present a case on dysentery (Pravahika), ulcerative colitis(Raktatisara), colorectal cancer (Bruhadantra arbuda) • The second team present a detailed presentation about the topic on etiopathogenesis, diagnosis • The third team perform clinical examination in a simulated case • The fourth team does a presentation on the investigations and plan of treatment • Followed by group discussion • Mentor clears the doubts, answers the queries and gives the concluding remarks
NLHT 16.3	Presenting the Phalashruti, Matra, Anupana and Sevana kala of Aushadha for Krimi roga	**Group Discussion** • The students are divided in groups of 3-5 students • Each Group is allotted specific Aushadha yoga • Students refer and compile the material from library sources and prepare a presentation • Each group will present the allotted topic in class • Students are encouraged to interact with the presenter under the supervision of the mentor • Mentor clears the doubts, answers the queries and gives the concluding remarks.
NLHT 16.4	Presenting the Phalashruti, Matra, Anupana and Sevana kala of Aushadha for Arsha	**Group Discussion** • The students are divided in groups of 3-5 students • Each Group is allotted specific Aushada yoga • Students refer and compile the material from library sources and prepare a presentation • Each group will present the allotted topic in class

		• Students are encouraged to interact with the presenter under the supervision of the teacher. • Mentor clears the doubts, answers the queries and gives the concluding remarks
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 16.1	Bedside Case taking of Atisara , Pravahika ,Arsha, Raktatisara and Krimi	Long case taking of Atisara,Pravahika and Arsha (2 cases X 2hours = 4 hours)each batch short case taking of Raktatisara and Krimi (2cases X 1hour= 2 hours) each batch. Interpretation of the Blood, Stools and Imaging reports of patients in IP related to Pureeshavaha srotas and its Avasthika chikitsa Students are asked to take cases in the IPD **(6 Hours**) **Demonstration Bedside** Refer case taking framework as described in NLHP3.1 and NLHP5.1 use for details **Team based learning** • The students will be divided into different teams • One team will be asked to present Blood reports of patients in IP related to Pureeshavaha srotas • The second team will present a presentation about Stools report of patients in IP related to Pureeshavaha srotas • The third team will be asked to present on Imaging reports of patients in IP related to Pureeshavaha srotas • The fourth team will do a presentation on avasthika chikitsa related to the lab reports • Followed by group discussion • Mentor clears the doubts, answers the queries and gives the concluding remarks
NLHP 16.2	Public awareness activity related to World colorectal cancer awareness day/world IBS day/World piles day	World colorectal cancer awareness day/ world IBS day/ World piles day (Any one) **(2 hours**) **Kinesthetic learning**-The students will be asked to make posters on various aspect of the illness and do an exhibition of the same OR **Role play**-The students will be encouraged to perform a role play depicting the importance of prevention of disease using the ayurvedic principles and swift action on witnessing the early

		symptoms. OR **Public outreach program-**Conduct a survey among the public to assess the susceptibility of Colorectal cancer and educate them about the same. OR Organise a rally to create awareness about Prevention OR conduct medical camps Prepare a report with a Geotagged Photograph

Paper 3 (Vyadhi Vishesha Chikitsa Evam Rasayana, Vajikarana)										
A3 Course outcome	**B3 Learning Objective (At the end of the session, the students should be able to)**	**C3 Domain/sub**	**D3 MK / DK / NK**	**E3 Level**	**F3 T-L method**	**G3 Assessment**	**H3 Assessment Type**	**I3 Term**	**K3 Integration**	**L3 Type**
Topic 17 Chikitsa of Annavaha srotodushti vikara (LH :12 NLHT: 4 NLHP: 14)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO1, CO3	Describe the Samprapti vighatana, Chikitsa sutra Chikitsa and Aushadha yoga of Agnimandya(SM3B) Aruchi/ Arochaka	CC	MK	KH	L&PPT	T-CS,T-OBT,QZ ,VV-Viva	F&S	I	-	LH
CO1, CO3	Articulate the Samprapti vighatana, Chikitsa sutra and Chikitsa of Gulma(SM3K)	CC	MK	KH	L&PPT	QZ ,T-CS,T-OBT,VV-Viva	F&S	I	-	LH
CO1, CO3	Detail Chikitsa sutra and Chikitsa yojana including Aushadha yoga and Pathyaapathya of Doshaja Gulma(SM3K)	CC	MK	KH	L&PPT	T-OBT,QZ ,T-CS	F&S	I	-	LH
CO1, CO3	• Generate a treatment protocol for Sama Pitta and Nirama	CC	MK	KH	L&PPT	T-CS,VV-Viva,QZ ,T-OBT	F&S	I	-	LH

	Pitta. • Illustrate Samprapti vighatana, Chikitsa sutra, and Chikitsa yojana including Aushadha yoga and Pathyaapathya of Amlapitta(SM39)									
CO1, CO3	Describe Samprapti vighatana, Chikitsa sutra ,Chikitsa yojana including Aushadha yoga and pathyapathya of Parinaama shoola(SM3D), Annadrava shoola (SM3E)	CC	MK	KH	L&PPT	VV-Viva,T-CS,T-OBT,QZ	F&S	I	-	LH
CO1, CO3	Explain Samprapti vighatana, Chikitsa sutra, Aushadha yoga, and Pathyaapthya of Chhardi(SM3L)	CC	MK	KH	L&PPT	VV-Viva,T-CS,T-OBT,QZ	F&S	I	-	LH
CO1, CO3	Detail the Samprapti vighatana, Chikitsa sutra, Chikitsa of Grahani dosha (SM36)	CC	MK	KH	L&PPT	T-CS,T-OBT,VV-Viva,QZ	F&S	I	-	LH
CO1, CO3, CO4	Construct Doshaja chikitsa , Chikitsa yojana including Aushadha yoga, Rasayana and Pathyaapathya of Grahani(SM36))	CAP	MK	KH	L&PPT	T-OBT,QZ ,VV-Viva,T-CS	F&S	I	-	LH
CO1, CO3	• Illustrate Sama dosha chiklitsa • Explain the Samprapti vighatana, Chikitsa sutra ,Chikitsa of Ajeerna(SM 3B), Alasaka(SM3C), Vishuchika, Vilambika(SM34)	CC	MK	KH	L&PPT	VV-Viva,T-CS,QZ ,T-OBT	F&S	I	-	LH
CO1, CO3	Apply Samprapti vighatana, Chikitsa sutra and Chikitsa of Aatopa, Aadhmana(SM31) and Aanaaha	CC	MK	KH	L&PPT	QZ ,T-OBT ,VV-Viva,T-	F&S	I	-	LH

						CS				
CO1, CO2, CO3	Review the Etiopathogenesis,Diagnosis, Ayurvedic Perspective and Principles of Management of Udaraarbuda (Malignancy of Abdomen)	CC	DK	K	L&PPT ,L&GD	T-OBT,QZ ,VV-Viva,T-CS	F	I	-	LH
CO1, CO3	Explain the Samprapti vighatana, Chiktsa sutra, and chikitsa of Shoola(SM33)	CC	MK	K	L&PPT	VV-Viva,T-CS,QZ	F&S	I	-	LH
CO1, CO2, CO4	Discuss the Etiopathogenesis, Diagnosis, Ayurvedic Mangement of Pittashaya Shotha(Cholecystitis),Agniashaya shotha(Pancreatitis), Diverticulitis and Gastroenteritis(Udara Shotha)	CC	DK	K	FC	T-CS,QZ , VV-Viva,T-OBT	F	I	-	NLHT17.1
CO1, CO2, CO3	Interpret the Etiopathogenesis, Diagnosis, and Ayurveda Management of Grahani (irritable bowel syndrome)	CC	DK	K	L&PPT	T-CS,P-VIVA	F	I	-	NLHT17.2
CO1, CO2, CO3	Differentiate the Etiopathogenesis, Diagnosis and Management of Urdhwaga Amlapitta(GERD) , Parinama shoola and Annadrava shoola(Acid Peptic Disease)	CC	DK	K	BS,DIS	QZ ,T-CS, VV-Viva,T-OBT	F	I	-	NLHT17.3
CO1, CO3	State the Phalashruti, Matra, Sevana kala and Anupana of various yoga mentioned in Annavaha srotodushti vikara	CC	MK	KH	LS,REC ,PER	VV-Viva,QZ	F&S	I	-	NLHT17.4
CO1, CO2, CO3, CO6, CO7	Identify Annavaha Srotodushti Lakshana in 5 cases of Annavahasroto vikaraDemonstrate the Chikitsa yojana including Pathyaapathya and Rasayana in 5 Annavahasrotodushti vikara	PSY-MEC	MK	KH	D-BED	C-INT,QZ , VV-Viva,SA	F&S	I	-	NLHP17.1
CO1, CO2, CO3, CO6,	Appraise two Annavahasroto dushti vikara in the OPD and formulate a treatment plan based on the Dosha Dooshya vivechana	CS	MK	SH	D	QZ ,C-INT, VV-Viva	F&S	I	-	NLHP17.2

CO7										
CO1, CO2, CO5	Demonstrate the insertion of the Nasogastric Tube/ Ryles tube in a mannequin	PSY-MEC	MK	KH	SIM,D, EDU	QZ ,CHK	F	I	-	NLHP17.3

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 17.1	Discussion on Chikitsa of Agniyashaya Shotha(Pancreatitis) and Pittashaya Shotha(Cholecystitis	Flipped classroom • The students are given the topic and they do a compilation on etiopathogenesis, ayurvedic perspective, and management from medical books and online scientific articles (shared by the mentor) • The following day the students get engaged in a discussion on the assigned topic • The students are encouraged to ask questions • The Mentor gives answers to the queries • Evaluation is done by Quiz and Presentation
NLHT 17.2	Compilation of scientific research articles on Irritable Bowel Syndrome/ (Grahani)	Journal Club • The topic is allotted to the students and they are asked to read scientific articles in different Journals and prepare notes on etiopathogenesis, the Ayurvedic perspective, and management on the given topic • The next day the students are divided into groups. They share the information gathered with other groups and engage in group discussions.

		• Mentors facilitate the discussion and students are encouraged to ask questions. • Mentors give answers to the queries • Evaluation is done by Quiz and Presentation
NLHT 17.3	Brainstorming on Etiopathogenesis, Diagnosis & Management of Urdhwaga Amlapitha(GERD), , Parinama shoola and Annadrava shoola(Acid Peptic Diseases)	Brainstorming • The topic is given and they are asked to prepare notes on etiopathogenesis, ayurvedic perspective, and management from medical books and online scientific articles (shared by mentor) • The next day the students are divided into groups and engage in group discussions and generate a conceptual framework on the Ayurveda perspective of the disease • Mentors facilitate the discussion and students are encouraged to ask questions • Mentors give answers to the queries • Evaluation is done by Quiz and Puzzles
NLHT 17.4	Clinical application of Aushadha yoga based on different Kalpana in Annavaha srotodushti vikara.	Library session and Class Presentation • The Mentor gives a brief description of each Aushadha yoga • The students are divided into small groups of 2 or 3 • Each group is given one Aushadha yoga • They are given a Library session and have to refer and collect information regarding each Aushadha yoga • Each group does a class presentation which is followed by a quiz
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**

NLHP 17.1	Bedside Case taking of Annavaha srotodushti vikara.	Bedside Case taking of Annavaha srotodushti vikara of Gulma(SM3K), Grahani (SM3), .Amlapitta(SM39), Parinaama shoola & Annadrava shoola/ Udarashoola(SM-3A, 3B,3C,3D,3E). Refer the case-taking format as explained in NLHP Activity Description 3.1 (Total 10hrs)
NLHP 17.2	OP-based case taking of two Annavahasrotodushti vikara	Refer to the case-taking format as mentioned in NLHP activity 5.1 (Total 2hrs)
NLHP 17.3	Insertion of Nasogastric tube/ Ryles tube in a Mannequin	Simulation/ Video-based learning (total 2hrs) • The students will be taken to the simulation Lab • The mentor gives a brief description of the indications and contraindications of NG tube insertion • Then, the Mentor demonstrates the Procedure Step By step to the students • The students practice the procedure on their own • The mentor guides the students and clears their doubts • Assessment will be done using a checklist. https://www.msdmanuals.com/professional/gastrointestinal-disorders/how-to-do-gastrointestinal-procedures/how-to-insert-a-nasogastric-tube

Topic 18 Chikitsa of Manovaha srotas dushti vikara (LH :8 NLHT: 4 NLHP: 8)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO3	Summarize the Chikitsa Sutra of Manovaha sroto dushti and explain Samprapti vighatana, Chikitsa sutra and Chikitsa of Unmada roga.(SQ03)	CC	MK	K	L&PPT ,DIS,REC,L_VC	CL-PR,T-CS,S-LAQ,CR-W,INT	F&S	II	-	LH
CO1, CO3	Explore the role of Adravyabhuta Chikitsa in Unmada roga.	CAP	MK	KH	L_VC,DIS,L&P	T-CS,T-OBT,CR-	F&S	II	-	LH

					PT	W,INT				
CO1, CO3	Explain the Samprapti vighatana, Chikitsasutra and Chikitsa of Apasmara roga(SK30)	CC	MK	KH	DIS,L&PPT ,L_VC,REC	CR-W,T-OBT,T-CS,S-LAQ,PRN	F&S	II	-	LH
CO1, CO3	Outline the Samprapti Vighatana, Chikitsasutra and Chikitsa of Atattvabhinivesha roga, Chittodvega and Vishada	CAN	MK	KH	L&PPT ,L,DIS	INT,CR-W,T-OBT,T-CS	F&S	II	-	LH
CO1, CO2, CO3	Review the Etiopathogenesis,Diagnosis and Management of Chinta roga (General Anxiety Disorder) .	CC	MK	KH	L_VC,DIS,L&PPT ,L	CR-W,T-CS,INT, C-VC,T-OBT	F&S	II	-	LH
CO1, CO2, CO3	Summarize the Etiopathogenesis,Diagnosis and Management of Vishada (Depression).	CS	MK	K	L&PPT ,L_VC, L,DIS	C-VC,T-CS,T-OBT,INT,CR-W	F&S	II	-	LH
CO1, CO2, CO3	Describe the etiopathogenesis, diagnosis, treatment principles of Epilepsy (non-organic)	CC	DK	KH	DIS,L&PPT ,L,L_VC	T-OBT,PRN,INT,CR-W,T-CS	F&S	II	-	LH
CO1, CO3	Describe the etiopathogenesis, diagnosis, treatment principles of Bhavodvega (Somatoform and mood disorder), Pratyabalajanya vikara (Stress induced disorder), Kamonmada (Psychosexual disorders).	CC	DK	KH	L&PPT ,L_VC, L,DIS	T-OBT,T-CS,QZ ,INT,CL-PR	F&S	II	-	LH
CO1, CO3	State the Ekala Aushadha prayoga, Aushadha Kalpa , Rasayana in Manasa roga.	CK	MK	KH	DIS,L&GD,TBL	SA,CBA,S-LAQ,INT	F&S	II	-	NLHT18.1
CO1, CO2	Explain the Bhutonmada and its basic management.	CC	NK	KH	EDU,PER,DIS	QZ , C-VC,PRN	F	II	-	NLHT18.2

CO1, CO2, CO3	Discuss clinical understanding of Atatvabhinivesha(Obsessive compulsive disorder,Neurotic disorder) and Vyaktatva evum swabhav viparyaya(Personality and behavioral disorder) and its treatment plan.	CAP	NK	KH	DIS,BS	QZ ,INT,CR-W	F	II	-	NLHT18.3
CO1, CO2, CO3	Discuss clinical understanding of Vishada (Depression) and its treatment plan	CAP	MK	KH	TUT,TBL,DIS	QZ ,INT	F&S	II	-	NLHT18.4
CO1, CO2, CO3, CO6, CO7	Demonstrate the Chikitsa yojana and prepare case record in a case of Manovaha srotodushti after performing relevant clinical examination	PSY-MEC	MK	SH	L&GD, D-BED, TBL,CD,PER	VV-Viva,PRN,PP-Practical,OSCE	F&S	II	-	NLHP18.1
CO1, CO2, CO3, CO7	Identify various clinical conditions of mental disorders, changes in the higher mental functions and study the case management protocols in the establishment.	PSY-MEC	NK	SH	FV,D-BED,RLE	C-VC,PP-Practical,OSCE,Log book	F	II	-	NLHP18.2
CO2, CO6	Assess the importance of commemmorating World Mental Health day	PSY-MEC	DK	SH	TUT,EDU	QZ	F	II	-	NLHP18.3

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 18.1	Aushadha prayoga for Manasa roga	**Group Discussion and Team based learning** • The students are divided in groups of 3-5 students • Each Group is allotted specific Aushadha yoga • Students refer and compile the material from library sources and prepare a presentation • Each group will present the allotted topic in class

		• Students are encouraged to interact with the presenter under the supervision of the mentor • Mentor clears the doubts, answers the queries and gives the concluding remarks 1.Ekala Aushadha Yoga (single drug therapy) for manasa roga with appropriate anupana: • **B**ramhi, • Kushmanda, • Ashwagandha, • Vacha • Jyotishmati, • Shankhapushpi 2. Aushadha Kalpas with appropriate sevana kala matra, anupana of manasa roga – • Kalyanaka Ghrita, • Saraswatarishta, • Manasamitra Vataka, • Panchagavya Ghrita, • Smritisagara rasa, 3.Naimittika Rasayana for manasa roga • Kushmanda avalehya • Brahmi Ghrita • Medhya rasayana

NLHT 18.2	Bhutonmada and its basic management.	Discussion on the lakshana of Bhutonmada and its basic management. Group Discussion • Small groups are formed in the class. • The group of students discuss and interact among themseleves the panchnidana of bhutonmada along with its chikitsa. • Student and Mentor interaction takes place and queries are solved.
NLHT 18.3	Detailed discussion on Obsessive compulsive disorder, Neurotic disorder, personality and behavioral disorder.	Detailed discussion on the Diagnosis, Clinical examination and treatment of Atatvabhinivesha(Obsessive compulsive disorder,Neurotic disorder) and vyaktatva evum swabhav viparyaya(Personality and behavioral disorder). Group Discussion • Students are instructed to refer from available resources and prepare PPT. • On the following day they present the topic using audio visual aids followed by Group Discussion. • Mentor answers the queries raised by the students.
NLHT 18.4	Detailed discussion on the Diagnosis, Clinical examination and treatment of Vishada (Depression).	**Team based learning** • The students are divided into different teams. • One team is instructed to present a case on depression • The second team is instructed to present a detailed presentation about the topic related to etiopathogenesis, diagnosis. • The third team is as instructed to perform clinical examination in a simulated case. • The fourth team is instructed to do a presentation on the treatment.

		• Presentation is followed by group discussion • Mentor answers the queries and gives the concluding remarks.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 18.1	Case study/ case scenario to devise a treatment plan according to principles of Manovaha srotas Documentation of a case/condition requiring manovaha srotas	Clinical case study (2 Long cases x 2hours = 4 hours per batch) Refer the case taking format mentioned in NLHP activity description 3.1 •
NLHP 18.2	An insight into functionality of a mental hospital /de-addiction center/psycho social rehabilitation center.	Activitiy - Field visit (2 hours) Community based learning Students are taken to nearest mental health care facility. • They observe the inmates of the facility and identify various mental health disorders and their management. • Students make a brief report about visit. The report is be presented by the students and assessed by the Mentors followed by concluding remarks.
NLHP 18.3	Public awareness activity related to Mental health day.	Commemoration of World Mental Health day(Oct 10) (2 hours) Community based learning Students are encouraged to conduct public awareness programs using suitable mass communication, audio-visual aids showing the importance of Mental Health, Preventive and therapeutic aspect of

		psychiatric disorders.

Topic 19 Chikitsa of of Antahsravi Granthi vyadhi (LH :4 NLHT: 4 NLHP: 4)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO2, CO3, CO6	Explain Chikitsa of Mandavatuk (Hypothyroidism)	CAP	MK	KH	L_VC,L &PPT ,LRI	M-CHT,V V-Viva,WP ,M-POS	F&S	II	-	LH
CO1, CO2, CO3, CO6	Describe Chikitsa of Tivravatuk (Hyperthyroidism) (SP9Y).	CAP	MK	KH	LRI,L& PPT ,L_VC	VV-Viva,M -CHT,WP, M-POS	F&S	II	-	LH
CO1, CO2, CO3, CO6	Explain Chikitsa of Adhivrikka granthi vikara (Adrenal gland Disorders): Hyperaldosteronism-Addison vyadhi (Addison's disease).	CAP	MK	KH	LRI,L_ VC,L& PPT	M-CHT,W P,M-POS,V V-Viva	F&S	II	-	LH
CO1, CO2, CO3, CO6	Explain Chikitsa of Adhivrikka granthi vikara (Adrenal gland disorders): Hypoaldosteronism-Cushing roga samuchchaya (Cushing's Syndrome).	CAP	MK	KH	LRI,L& PPT ,L_VC	M-POS,VV -Viva,WP, M-CHT	F&S	II	-	LH
CO1, CO2, CO3, CO6	Discuss Chikitsa of Piyusha granthi vikara (Pituitary disorders): Hypopituitarism-Vamanatva (Dwarfism) (SP9Y).	CAP	NK	KH	TUT,DI S,PER	VV- Viva,QZ	F	II	-	NLHT19.1
CO1, CO2, CO3,	Explain Chikitsa of Piyusha granthi vikara (Pituitary disorders): Hyperpituitarism-Dirghakayata /Atidirgha (Gigantism) and Vikayata (Acromegaly).	CAP	NK	KH	DIS,PE R,TUT	QZ ,VV- Viva	F	II	-	NLHT19.2

CO6										
CO1, CO2, CO3, CO6	Explain the Chikitsa of Piyusha granthi vikara : Udakameha (Diabetes insipidus).	CAP	NK	KH	PER,TUT,DIS	QZ ,VV-Viva	F	II	-	NLHT19.3
CO1, CO2, CO3, CO6	Explain the Chikitsa of Para-avatuka granthi vyadhi (Parathyroid disorders: Hypoparathyroidism and Hyperparathyroidism).	CAP	NK	KH	DIS,PER,TUT	QZ ,VV-Viva	F	II	-	NLHT19.4
CO1, CO2, CO3, CO6, CO7	Demonstrate clinical case of an Endocrine disorder and discuss its Chikitsa with Pathyapathya.	PSY-SET	MK	KH	D,TBL, PER,CD ,LRI	QZ ,P-VIVA,OSCE,PRN,P-CASE	F&S	II	-	NLHP19.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 19.1	Hypopituitarism-Vamanatva (Dwarfism) (SP9Y)	Students prepare a powerpoint presentation to read, learn and understand the topic. **Group Discussion** • Mentor allots the topic to the student. • Student prepares a Power point presentation for the allotted topic by referring to the study material. • Student presents the topic in the class using power point. • A discussion is generated among the students on the given topic. • Mentor concludes the class with remarks.

NLHT 19.2	Hyperpituitarism-Dirghakayata /Atidirgha (Gigantism) and Vikayata (Acromegaly)	Students prepare a powerpoint presentation to read, learn and understand the topic. Refer the Activity Description of NLHT 19.1
NLHT 19.3	Udakameha (Diabetes insipidus)	Students prepare a powerpoint presentation to read, learn and understand the topic. Refer the Activity Description of NLHT 19.1
NLHT 19.4	Hypoparathyroidism and Hyperparathyroidism	Students prepare a powerpoint presentation to read, learn and understand the topic. Refer the Activity Description of NLHT 19.1

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 19.1	Case taking of Endocrine disorder. Case presentation of Endocrine disorder	Case based learning(4NLHP - 2 Cases) Please refer the case taking framework as described in NLHP 3.1.

Topic 20 Chikitsa of Vyadhikshamatva vikara (LH :3 NLHT: 4 NLHP: 3)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO2, CO3	Describe the Etiopathogenesis, Diagnosis and Ayurvedic management of Vyadhikshamata heenatajanya vikara **(**Immunodeficiency diseases -Primary and secondary immune deficiency disorders)	CC	MK	KH	DIS,L,L &PPT	QZ ,PRN	F&S	II	-	LH
CO1, CO2, CO3	• Explain the Etiopathogenesis, Diagnosis and Principles of management of Atmapratirodha Kshamatvajanya Vikara (Auto immune disorders)	CC	MK	KH	L_VC,L &PPT ,L	PRN,QZ	F&S	II	-	LH

	• Explain Samprapti vighatana and Chikitsa of Pratirakshija (Systemic Lupus Erythematosus)									
CO1, CO2, CO3	Describe the Etiopathogenesis,Types, Diagnosis and Principles of management of Atisamvedanasheelata janya vyadhi (Hypersensitivity Reactions).	CC	MK	KH	L,L_VC ,L&PPT	QZ ,PRN	F&S	II	-	LH
CO1, CO2, CO3	Discuss the Etiopathogenesis, Diagnosis, Principles of management and Ayurvedic understanding of Ankylosing Spondylitis	CC	NK	K	BL,L& GD,L_ VC	QZ ,PRN	F	II	-	NLHT20.1
CO1, CO2, CO3	Summarizes the Etiopathogenesis, Diagnosis, Principles of management along with Ayurvedic perspective of Multiple sclerosis (MS)	CK	NK	K	DIS,L_ VC,L& GD,LRI ,TBL	QZ ,PRN	F	II	-	NLHT20.2
CO1, CO2, CO3	Discuss the Etiopathogenesis, Diagnosis,Pprinciples of management along with Ayurvedic perspective of Crohn’s disease	CC	NK	K	L_VC,C D,L&G D,DIS,L RI	QZ ,PRN	F	II	-	NLHT20.3
CO1, CO2, CO3	Discuss the Etiopathogenesis, Diagnosis, Principles of management along with Ayurvedic perspective of Rheumatoid Arthritis	CC	NK	K	BL,BS, DIS,L& GD,LRI	PRN,QZ	F	II	-	NLHT20.4
CO1, CO2, CO3	Demonstrate the Chikitsa yojana & prepare case record in cases of Vyadhikshamatva vikara after performing relevant clinical examinations	PSY-MEC	MK	KH	LRI,D-BED,PT ,CD,DL	PRN,Mini-CEX,OSCE ,P-VIVA,P-PRF	F&S	II	-	NLHP20.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity

NLHT 20.1	Approach to the Diagnosis, Ayurvedic perspective and management of Ankylosing Spondylitis	**Blended learning and Group discussion** • Students are given online learning material like description of the internet link and scientific articles • Students are divided into various small groups and they will be allotted topic related to Ankylosing Spondylitis • Each group is asked to do a presentation related to the topics given • Group discussion will be followed • Mentor clears the doubts, answers the queries and gives the concluding remarks
NLHT 20.2	Approach to the Diagnosis, Ayurvedic perspective and management of Multiple sclerosis	**Team-based learning, Presentation** • The students are divided into different teams • One team is asked to present on etiopathogenesis and diagnosis of Multiple sclerosis • The second team does a detailed presentation about the Ayurvedic understanding of Multiple sclerosis • The third team does a presentation on the investigations related to multiple sclerosis • Followed by a group discussion on Ayurveda management • Mentors answers the queries and gives the concluding remarks.
NLHT 20.3	Approach to the Diagnosis, Ayurvedic perspective and management of Crohn’s disease	**Class Presentation** • The students are encouraged to collect information on the etiopathogenesis, Diagnosis,

		Investigations Prognosis and Management of Crohn's disease • The students do a presentation • Discussion is followed • Mentors answers the queries and gives the concluding remarks
NLHT 20.4	Approach to the Etiopathogenesis, Diagnosis, Ayurvedic perspective and management of Rheumatoid Arthritis	**Blended learning and Group discussion** • Students are given online learning material like description of the internet link and scientific research articles • Students are divided into various small groups, and they will be allotted topic related Rheumatoid Arthritis • Each group is asked to do a presentation related to the topic given • Group discussion will be followed • Mentor clears the doubts, answers the queries and gives the concluding remarks
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 20.1	Bed side Case Presentation on Immune system disorders	Case Presentation on Immune system disorders 2 cases per clinical batch One long case 2hrs &one short case 1 hr.) Total =3hrs Refer case taking framework as described in NLHP3.1 and NLHP5.1 use for details
Topic 21 Chikitsa of Shukravaha srotasa vikara (LH :3 NLHT: 4 NLHP: 4)		

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO3, CO4	Describe the Samprapti vighatana, Chikitsa sutra and Chikitsa of Klaibya and Shukralpata	CC	MK	KH	L&PPT ,L_VC, L	PRN,CL-PR,QZ	F&S	III	-	LH
CO1, CO2, CO3	Elaborate the Samprapti vighatana, Chikitsa sutra and Chikitsa of Shukradosha and Kshinashukra	CC	MK	KH	L_VC,L ,L&PPT	PRN,QZ	F&S	III	-	LH
CO1, CO3, CO4	Detail the Samprapti vighatana, Chikitsa sutra and Chikitsa of Dhwajabhanga and Explain the causes of Impotency and Plan the treatment.	CC	MK	KH	DIS,L,L _VC,L &PPT	QZ ,PRN	F&S	III	-	LH
CO2, CO4	Discuss the Applied clinical anatomy and Endocrinology of male reproductive system in context of chikitsa of Shukravahasrotas Dushti Vikara	CC	NK	K	L&GD, DIS,L_ VC,BL	PRN,QZ	F	III	-	NLHT21.1
CO2, CO4	Determine the Etiopathogenesis, Diagnosis, Principles of management and Ayurveda perspective in the treatment of Male hypogonadism, and Infertility	CE	NK	K	L_VC,T BL,DIS, BS,L& GD	PRN,QZ	F	III	-	NLHT21.2
CO1, CO3, CO4	State the Phalashruti, Matra, Anupana and Sevana kala of Aushadha yoga in Shukravaha Srotas vikara • Vidarikanda churna • Vrishya ghrita • Madanakameswara lehya • Vrishya gutika	CK	DK	K	DIS,BS, L&GD, REC	PRN,QZ	F	III	-	NLHT21.3
CO1,		CE	NK	K	DIS,TB	PRN,QZ	F	III	-	NLHT21.4

CO2, CO3, CO4	• Explain the concept of Beeja dushti janya vikara and corelate it with hereditary and congenital disorders. • Sketch a management plan for Beejadushti janya vikara • Explain Ayurvedic perspective and principles of management of Male hypogonadism,and Infertility				L,L&GD,L_VC,CBL					
CO1, CO2, CO3, CO4, CO5	Demonstrate the Chikitsa yojana & prepare case record in cases of Shukravaha srotodushti vikara after performing relevant clinical examination	PSY-MEC	MK	SH	L&GD, L_VC,DIS,PER	PRN,QZ	F&S	III	-	NLHP21.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 21.1	Understanding the Applied clinical anatomy and endocrinology aspects for male reproduction	**Blended learning** • Students are given online learning material like description of the digital resources and scientific research articles • Students are divided into various small groups and they will be allotted topic related to Applied clinical anatomy and endocrinology aspects of male reproductive system • Each group is asked to do a presentation related to the topic given • Group discussion will be followed • Mentor clear the doubts and answer the queries to conclude with remarks on the topic
NLHT 21.2	Understanding on the Diagnosis, Clinical	**Team based learning**

	examination and Ayurvedic perspective and Principles of management of Male hypogonadism, and Infertility	• The students are divided into different teams • One team is asked to present a case on Male hypogonadism and Infertility • The second team present a detailed presentation about the topic related to etiopathogenesis, diagnosis • The third team perform clinical examination in a simulated case • The fourth team does a presentation on the investigations • Followed by group discussion • Mentor will clear the doubts and answer the queries • Give the concluding remarks
NLHT 21.3	Presenting the Phalashruti, Matra, Anupana and Sevana kala of Aushadha yoga in Shukravaha Srotas vikara	**Group Discussion** • The students are divided in groups of 3-5 students • Each Group is allotted specific Aushadha yoga • Students refer and compile the material from library sources and prepare a presentation • Each group presents the allotted topic in class • Students are encouraged to interact with the presenter under the supervision of the teacher. • Mentor gives concluding remarks on the presentations
NLHT 21.4	Detailed understanding on the Diagnosis, Clinical examination and Ayurvedic perspective and principles of management of Male hypogonadism, Infertility and Beeja dushtijanya vikara	**Team based learning** • The students are divided into different teams • One team is asked to present a case on Male hypogonadism and Infertility • The second team present a detailed presentation about the topic related to etiopathogenesis, diagnosis • The third team perform clinical examination in a simulated case • The fourth team does a presentation on the investigations • Followed by group discussion

		• Mentor will clear the doubts and answer the queries • Give the concluding remarks

Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 21.1	Bedside case taking of case of Klaibya (Male sexual dysfunction), Shukradosha	**Case Presentation on Immune system disorders** Two cases per clinical batch (One long case 2 hours & one short case 1 hour.) Total =3 hours **Demonstration bedside** Refer casetaking framework as described in NLHP3.1 and NLHP5.1 use for details

Topic 22 Chikitsa of Guhya roga (LH :2 NLHT: 2 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO2, CO3, CO6	Describe the Samprapti vighatana, Chikitsa and Aushadha yoga of Upadamsha (SN30), Phiranga (Syphilis) (SN31) and Puyameha (Gonorrhoea) (SN30).	CAP	DK	KH	L&PPT	VV-Viva	F	III	-	LH
CO1, CO2, CO3, CO6	Describe the Samprapti vighatana, Chikitsa and Aushadha yoga of Vankshana lasika granthikanarbud (Lymphomagranuloma Inguinale), Phirangiya vrana (Soft Chancroid) and Visarpa (Herpes Simplex) (SN4T).	CAP	DK	KH	CBL,L_VC,L,DIS,BS	VV-Viva	F&S	III	-	LH
CO1, CO2, CO3,	Differentiate between the Chikitsa of Guhya roga	CAP	DK	KH	L_VC,DIS,TPW,LS	M-POS,VV-Viva,M-CHT,QZ	F	III	-	NLHT22.1

CO6						,WP				
CO1, CO2, CO3, CO6	Discuss the Chikitsa yojana of Guhya roga along with Phalashruti, Aushadha sevana kala, Matra and Anupana of the following Aushadha yoga • Chopachinyadi churna • Ashtamurti rasa • Rasakarpoora • Triphala masee	CAP	DK	KH	PrBL,DIS,LRI,TBL	VV-Viva	F&S	III	-	NLHT22.2
CO1, CO2, CO6, CO7	Demonstrate awareness about Sexually transmitted diseases (STD) among the teenagers/ young adults in the educational institutes.	AFT-CHR	MK	K	TBL	Log book	F	III	-	NLHP22.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 22.1	Differentiating between the Chikitsa of Guhya roga	Student should learn to differentiate the treatment of Guhya rogas based on their sign and symptoms. Student should prepare an algorithm of treatment plan according to the diagnosis. **Team Project Work** • Students are assigned the task of collecting images/photos of the ulcer pattern of different Guhya rogas. • They are encouraged to prepare posters or charts. • They are also instructed to prepare flow charts of treatment in different Guhya rogas.

NLHT 22.2	Chikitsa of Guhya roga	Student should learn to treat various Guhya roga by making a clinical diagnosis supported by laboratory investigations and Prayoga of different Aushadha yoga with their Phalashruti, Aushadha sevana kala, Matra and Anupana. **Small group discussion** • The Mentor divides the students into small groups. • Some groups are alloted different Guhya roga and other groups are alloted different aushadha yoga. • These groups discuss among themselves the treatment plan of given roga. • The groups which are alloted aushadha yoga should discuss different aspects of its use. • Each Group gives the presentation. • Mentor assesses the presentation of students and conclude with remarks.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 22.1	Creating awareness about Sexually transmitted diseases during National STD Awareness week.	**Community Health Education/Public Outreach Program** (2 NLHP) • .Students are instructed to prepare awareness material regarding Sexually Transmitted Diseases like documentary, posters, slogans etc. • .A convenient day is selected from the National STD awareness week (Second week of April) • .Students are taken to nearby educational institute. • .Students display the awareness material and educate the audience under the guidance of the mentor.

Topic 23 Vajikarana (LH :6 NLHT: 3 NLHP: 6)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1,	Recall the principles of Vajikarana & summarize its need along	CC	MK	K	PER,TU	PRN,VV-	F&S	III	-	LH

CO3, CO4	with the benefits				T,L&PPT	Viva,QZ , M-POS,S-LAQ				
CO1, CO3, CO4	Comprehend the concept of Shuddha Shukra and analyse its role in male fertility and reproductive health	CAN	MK	KH	L&PPT ,LRI,TUT	M-CHT,QZ ,VV-Viva,COM,WP	F&S	III	-	LH
CO1, CO3, CO4	Explain the types of Vajikarana Dravya useful in different Shukravaha sroto dushti vikara	CC	DK	KH	PER,L&PPT ,FC ,L_VC	S-LAQ,QZ ,M-POS,PRN,PUZ	F	III	-	LH
CO1, CO3, CO4	Elaborate the role of Vajikarana in the management of Infertility(Klaibya) and Impotency(Shandhatva)	CC	MK	KH	PER,LRI,SY,L&PPT	DEB,QZ ,COM,PRN,VV-Viva	F	III	-	LH
CO1, CO3, CO4	State the Therapeutic benefits of individual herbs in Shukra janana mahakashaya & Shukra shodhaka mahakashaya for the treatment of male/female Infertility	CC	DK	KH	L&PPT ,LS,TUT,BS	QZ ,PUZ,T-OBT,VV-Viva,M-CHT	F&S	III	-	LH
CO1, CO3, CO4	Classify the Phalashruti, Sevana kala, Matra & Anupana of the following Aushadha KalpanaSiddha makardwajamJatiphaladi vatiAmrita bhallataka	CK	NK	K	L&PPT ,TUT,FC,PER, LS	M-CHT,CL-PR,VV-Viva,QZ	F	III	-	LH
CO1, CO3, CO4	Discuss the Phalashruti of the following Aushadha Kalpana along with its Sevana kala, Matra & AnupanaShilajatuVanga bhasmaSuvarna bhasma	CK	DK	KH	L&GD, FC,PER ,TBL,LS	P-EXAM,CL-PR,COM ,VV-Viva,QZ	F&S	III	-	NLHT23.1
CO1, CO3, CO4	Devise the Chikitsa Karmukatva, Sevana kala, Matra & Anupana of the following Aushadha KalpanaVajikarana ghrutaVrishya ghrutaVrishya gutikaShrigopal taila	CK	DK	KH	BL,TBL ,SY,LS, TUT	WP,M-POS ,VV-Viva,COM,T-CS	F&S	III	-	NLHT23.2

CO1, CO3, CO4	Demonstrate the Phalashruti, Sevana kala, Matra & Anupana of the following Vajikarana YogaMadanakameswara lehyaNarasimha rasayanBrimhani gulika	CC	DK	KH	PER,PSM,LS,DIS,TBL	M-CHT,T-CS,CL-PR,VV-Viva,P-VIVA	F&S	III	-	NLHT23.3
CO1, CO3, CO4	Formulate the appropriate treatment applying the principles of management of Vajikarana in Shukra Dushti	PSY-MEC	DK	SH	LRI,D-BED,CBL,DIS,TBL	P-CASE,OSCE,CBA,C-VC,SP	F&S	III	-	NLHP23.1
CO1, CO3, CO4	Construct a Chikitsayojana based on the interpretation of Investigations related to Male & Female Infertility	PSY-MEC	NK	SH	CD,LRI,CBL,SIM,DIS	P-VIVA,P-POS,SP, C-VC,CBA	F&S	III	-	NLHP23.2

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 23.1	Mono Drug Vajikarana therapy like - Shilajatu, Suvarna bhasma and Vanga bhasma	Student discusses the phalashruti of a few ekala Vajikarana Dravya along with their sevana kala, matra, anupana & pathyaapathya. • The students participate in Groups as per the instructions of the Mentor • Mentor allots one of mono drug vajikarana therapy like Shilajatu, Suvarna bhasma or Vanga bhasma to each group to discuss & construct a chikitsa yojana. • Each group discusses about indications, method of administration, phalashruti, Matra, Anupana & Pathyaapathya kalpana of the alloted herb. • Each group gives a powerpoint presentation on the allotted topic. • The Mentor concludes the session with remarks

NLHT 23.2	Vajikarana ghruta, Vrishya ghruta, Vrishya gutika & Shrigopal taila in Vajikarana Prayoga	Students devise the Chikitsa karmukatva, Sevana kala, Matra, Anupana & Pathyaapathya of Vajeekarana aushadha Kalpana. Team Based Learning • The Mentor selects few students & divide them into 4 teams • Each team is allotted one of Vajeekaran ghruta, Vrishya ghruta, Vrishya gutika or Shrigopal taila & instructed to search information. • The teams refer to & collect the necessary information related to indications, method of administration, phalashruti, Matra, Anupana & Pathyaapathya of the given medicine from library sources • Each team discusses the contents and presents the summary. • Other students are encouraged to participate in the discussion under supervision of mentor. • The Mentor provides concluding remarks on the presentation.
NLHT 23.3	Vajikarana Yoga - Madanakameshwara Lehya, Narasimha Rasayan & Brimhani Gulika.	Students to demonstrate the Phalashruti, Sevana kala, Matra, Anupana & Pathyaapathya of Vajikarana Aushadha yoga Team based Learning • The Mentor divides the students into small groups & instructs them to refer tutorials, library resources, reading materials on the allotted Madanakameswara lehya, Narasimha rasayana or Brimhani gulika • The students in groups are instructed to present their knowledge & ideas on the indications, method of administration, phalashruti, matra, anupana & pathyaapathya of the given medicine by preparing posters/charts/e-posters. • Students will accordingly present the discussed topics through poster • The Mentor encourages the activity & gives concluding remarks

Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 23.1	Formulate a treatment plan according to principles of Vajikarana.	The students will document:- A case of shukra dushti Structure an appropriate treatment plan Select the appropriate aushadha(aushadha yoga/mono drug therapy). Case based learning - 2 long cases x 2 hours = 4hours per batch The Mentor takes students to the ward/OPD of Kayachikitsa. Students in the clinical batch select a case requiring vajikarana. Mentor shows the construction of the chikitsa yojana and documenting it in the following steps: • The students shall introduce self to the patient and take verbal consent. • The students shall interrogate the patient and document the clinical history. • The students further brief the patient about the steps in examination that will be performed on him/her. • The students perform the relevant clinical examinations adopting the Ayurvedic and conventional clinical methods of examination of the involved system • students collect information from Blood analysis, semen analysis, radiological investigations and consider it for doshadushyadi vivechan • The students interpret the collected information and state the vyadhi nama (arrive at a tentative clinical diagnosis) following the method of vyavachedaka nidana (differential diagnosis) • The students determine the sadhyaasadhyata (prognosis) of the disease in the patient. • The students formulate a chikitsa yojana of vajikaran medicines • The students recommend pathyaapathya to the patient. • Finally, the students address the doubts of the patient & acknowledge his/her cooperation in the case taking. • The students present and discuss the documented short case. • The mentor facilitates the case presentation. • The mentor evaluates the student’s performance, knowledge, psychomotor and

		communication skills using rubrics or checklist and gives the feedback. • Remedial measures should be implemented if found necess
NLHP 23.2	Constructing a Chikitsa yojana based on the Interpretation of the Investigations related to Male & Female Infertility	Students will construct a chikitsa yojana in a case interpreting the available investigations like Blood analysis, semen analysis, radiological investigations. Case based learning - 2 short cases x 1hour = 2hours per batch Each student will be given two cases(one male & one female) by the mentor for interpretations of the available investigation reports in a male/female infertility patient for treatment purpose Mentor shows the art of writing a rational treatment prescription and documenting it in the following steps: • The students shall introduce self to the patient and take verbal consent. • The students shall interrogate the patient and document the clinical history. • The students further brief the patient about the steps in examination that will be performed on him/her. • The students perform the relevant clinical examinations adopting the Ayurvedic and conventional clinical methods of examination of the involved system • students collect information from Blood analysis, semen analysis, radiological investigations and consider it for doshadushyadi vivechan • The students interpret the collected information and state the vyadhi nama (arrive at a tentative clinical diagnosis) following the method of vyavachedaka nidana (differential diagnosis) • The students determine the sadhyaasadhyata (prognosis) of the disease in the patient. • The students formulate a chikitsa yojana of vajikaran medicines • The students recommend pathyaapathya to the patient. • Finally, the students address the doubts of the patient & acknowledge his/her cooperation in the case taking. • The students present and discuss the documented short case. • The mentor facilitates the case presentation.

		• The mentor evaluates the student's performance, knowledge, psychomotor and communication skills using rubrics or checklist and gives the feedback. • Remedial measures should be implemented if found necessary.

Topic 24 Rasayana (LH :6 NLHT: 4 NLHP: 8)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO3, CO4	Retrieve the Indications of Rasayana & Comprehend the Dose of Rasayana according to Ayu(age) of the patient/subject	CAN	DK	KH	L_VC,L &PPT	PRN,S-LAQ,QZ ,PUZ,M-CHT	F&S	III	-	LH
CO1, CO3, CO4	Identify the role of Aachara Rasayana in clinical practice	CK	DK	KH	BS,L&PPT ,L_VC,PL, PER	PA,M-CHT ,O-QZ,T-CS,WP	F	III	-	LH
CO1, CO3, CO4	Elaborate the application & benefits of Naimittika Rasayana with examples.	CC	MK	KH	TUT,PER,KL,BS,L&PPT	PRN,M-POS,P-VIVA, PUZ,COM	F&S	III	-	LH
CO1, CO3, CO4	Classify the given Vyadhihara Rasayana according to its Chikitsa karmukatva, Matra, Aushadha sevana kala & AnupanaAamalaki RasayanaBhallataka RasayanaVardhamana Pippali Rasayana	CC	NK	KH	FC,L&PPT ,BS,PER	PRN,DEB, QZ ,COM, M-CHT	F&S	III	-	LH
CO1, CO3, CO4	Explain the Chikitsa karmukatva, Matra, Aushadha sevana kala & Anupana of the following Vyadhihara Rasayana Tuvaraka Rasayana	CC	NK	KH	FC,PER ,BS,L& PPT	WP,PRN,M-POS,VV-Viva,QZ	F	III	-	LH

	Shilajatu RasayanaLasuna Rasayana									
CO1, CO3, CO4	Elaborate the Aushadha sevana kala, Matra & Anupana along with the Chikitsa Karmukatva of the following Vyadhihara RasayanaTriphala RasayanaChyavanprashaAgastya HaritakiKushmanda Rasayana	CC	NK	KH	L&PPT ,FC,BS, PER	M-CHT,COM,PUZ,QZ ,VV-Viva	F	III	-	LH
CO1, CO3, CO4	Demonstrate the use of single herbs as Rasayana in Chikitsa	CAP	DK	KH	LS,TBL ,IBL,L &GD	SA,T-CS,CL-PR,PRN, M-POS	F&S	III	-	NLHT24.1
CO1, CO3, CO4	Integrate the Evidence based therapeutic effects of Rasayana	CAN	NK	KH	IBL,PER,LRI,LS,PL	CL-PR,QZ ,PRN,CR-RED,PA	F&S	III	-	NLHT24.2
CO1, CO3, CO4	Illustrate a treatment protocol incorporating a Rasayana	CAP	NK	KH	CBL,SIM,FC,IBL,PER	Log book,VV-Viva,CL-PR,P-CASE,CBA	F&S	III	-	NLHT24.3
CO1, CO3, CO4	Devise an ideal Rasayana protocol as Apunarbhava Chikitsa	CS	NK	KH	SIM,DIS,LS,FC ,PER	VV-Viva,M-CHT,CL-PR,WP,P-CASE	F&S	III	-	NLHT24.4
CO1, CO3, CO4	Devise an appropriate treatment protocol in a case study/case scenario applying the principles of Rasayana	PSY-GUD	DK	SH	CBL,LRI,IBL,D-BED,CD	P-CASE,OSCE,SP,CBA,P-VIVA	F&S	III	-	NLHP24.1
CO1, CO3,	Formulate appropriate Rasayana in the given caseKanthya RasayanaVarnya RasayanaKeshya RasayanaMedhya	PSY-SET	NK	SH	LRI,CBL,SIM,	CBA,SP,P-CASE,Log	F&S	III	-	NLHP24.2

CO4	RasayanaNaimittika Rasayana – ShwasaNaimittika Rasayana – Tvacha roga				CD,DIS	book, C-VC					

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 24.1	Application of the properties of the single herbs for using them as Rasayana	Discussion on justifying the use of single herbs as Rasayana in Chikitsa Group Discussion • The students participate in Groups as per the instructions of the Mentor • Mentor allots single herb to each group to discuss their Rasayana properties. • Each group discusses about kalpana, matra & anupana of the alloted herb. • Each group gives a ppt presentation on the allotted topic. • The Mentor concludes the session with remarks
NLHT 24.2	Evidence based therapeutic effects of Rasayana	Utilization of Library resources by the students to collect information on Rasayana from peer-reviewed Indexed Journals Team based learning • The Mentor selects few students & divide them into 4 teams • Each team is instructed to search articles related to rasayana in peer- reviewed indexed journals to gather information. • The teams refer to & collect the necessary information from the referred research article of library sources • Each team discusses the contents and presents the summary. • Other students are encouraged to participate in the discussion under supervision of mentor. • The Mentor provides concluding remarks on the presentation.

NLHT 24.3	Utility of Naimittika Rasayana in a treatment protocol	Case Based Learning • The Mentor allots simulated disease condition to the students • The students are expected to chalk out an appropriate chikitsa yojana along with rasayana prayog for the given diagnosis. • A discussion is generated among the students for the given topics • Selected Students will present the given topic under the supervision of mentor. • The Mentor concludes the class will remarks
NLHT 24.4	Planning of Apunarbhava Chikitsa applying the principles & procedures of Rasayana Therapy	Flipped classroom • Students are divided into small groups by the mentor • students in the group are asked to prepare a presentation on the role of rasayana in apunarbhava chikitsa • In the following lecture, groups present the sequential procedures of rasayana therapy (purva & pradhana karma). • Other group students are encouraged to participate in the discussion • The Mentor supervises the presentations & provides guidance
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**

NLHP 24.1	Devise a treatment plan according to principles of Rasayana.	Bedside Demonstration- 3 Long cases x 2 hours = 6 hours per batch Documentation of a case/condition requiring Rasayana Selection of appropriate Rasayana dravya by the student. The Mentor takes students to the ward/OPD of Kayachikitsa. Students in the clinical batch select a case requiring rasayana. Mentor shows the construction of the chikitsa yojana and documenting it in the following steps • The students shall introduce self to the patient and take verbal consent. • The students shall interrogate the patient and document the clinical history. • The students further brief the patient about the steps in examination that will be performed on him/her. • The students perform the relevant clinical examinations adopting the Ayurvedic and conventional clinical methods of examination. • The available investigation reports are interpreted by the students. • The students analyze the nidana panchaka and extent of alteration in samprapti ghataka. The students interpret the collected information and state the vyadhi nama (arrive at a tentative clinical diagnosis) following the method of vyavachedaka nidana (differential diagnosis) • The students determine the sadhyaasadhyata (prognosis) of the disease in the patient. • The students construct the chikitsa yojana & prescribes certain rasayana required for the diagnosed disease. • The students recommend pathyaapathya to the patient. • Finally, the students address the doubts of the patient & acknowledge his/her cooperation in the case taking. The students present and discuss the documented long case. • The mentor facilitates the case presentation. • The mentor evaluates the student's performance, knowledge, psychomotor and communication skills using rubrics or checklist and gives the feedback. • Remedial measures should be implemented if found necessary.
NLHP 24.2	Formulate a treatment plan using appropriate enlisted Rasayana	Case Based Learning - 2 Short cases x 1 hour = 2 hours per batch The Mentor takes students to the ward/OPD of Kayachikitsa & assigns them a case requiring rasayana

		treatment. Mentor shows the art of writing a rational treatment prescription and documenting it in the following steps: • The students shall introduce self to the patient and take verbal consent. • The students shall interrogate the patient and document the clinical history. • The students further brief the patient about the steps in examination that will be performed on him/her. • The students perform the relevant clinical examinations adopting the Ayurvedic and conventional clinical methods of examination of the involved system • The available investigation reports are interpreted by the students. • The students interpret the collected information and state the vyadhi nama (arrive at a tentative clinical diagnosis) following the method of vyavachedaka nidana (differential diagnosis) • The students determine the sadhyaasadhyata (prognosis) of the disease in the patient. • The students formulate a rational treatment prescription for the diagnosed disease & plan the appropriate rasayana therapy enlisted below. • Kanthya Rasayana, Varnya Rasayana, Keshya Rasayana, Medhya Rasayana, Naimittika Rasayana – Shwasa, Naimittika Rasayana – Tvacha roga. • The students recommend pathyaapathya to the patient. • Finally, the students address the doubts of the patient & acknowledge his/her cooperation in the case taking. • The students present and discuss the documented short case. • The mentor facilitates the case presentation. • The mentor evaluates the student's performance, knowledge, psychomotor and communication skills using rubrics or checklist and gives the feedback. • Remedial measures should be implemented if found necessary.

Topic 25 Chikitsa of Jarajanya vikara and Indriyapradoshaja vikara (LH :2 NLHT: 2 NLHP: 12)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1,	Explain Samprapti vighatana and Samanya chikitsa of Jarajanya	CC	MK	SH	L,DIS,L	S-LAQ,T-C	F&S	III	-	LH

CO3	vikara and Indriyapradoshaja vikara .				&PPT	S,CR-W,T-OBT,CL-PR				
CO1, CO2, CO3	Review the Etiopathogenisis, Diagnosis and Principles of Management of Smritilopa(Alzheimer's disease).	CC	MK	KH	L_VC,DIS,L&PPT	OSCE,T-CS,INT,CR-W,T-OBT	F&S	III	-	LH
CO1, CO3	State the Ekala Aushadha prayoga, Aushadha Kalpa, Rasayana in Jarajanya vikara.	CK	MK	KH	DIS,L&GD,TBL	CBA,INT,S-LAQ,QZ	F&S	III	-	NLHT25.1
CO1, CO3	State the Ekala Aushadha prayoga, Aushadha Kalpa, Rasayana in Indriyapradoshaja vikara.	CK	MK	KH	DIS,L&GD,TBL	S-LAQ,PRN,CBA,INT	F&S	III	-	NLHT25.2
CO1, CO2, CO3, CO6, CO7	Demonstrate the Chikitsa yojna and prepare case record in a case of Jarajanya vikara and Indriyapradoshaja vikara after performing relevant clinical examination	PSY-MEC	MK	SH	CBL,DIS,D-BED,L&GD	Log book,OSCE,PRN	F&S	III	-	NLHP25.1
CO1, CO2, CO3	Identify various clinical conditions of elderly, age related physiological changes and their clinical significance and study the case management protocols in the establishment.	PSY-MEC	NK	SH	FV,D-BED,RLE,DIS	CBA, C-VC,OSCE,Log book	F	III	-	NLHP25.2
CO2, CO7	Create awareness on the Role of Ayurveda in the prevention and management of age related diseases.	PSY-MEC	DK	SH	TUT,DIS,EDU	QZ ,Log book	F	III	-	NLHP25.3

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 25.1	Aushadha prayoga for Jarajanya roga	**Group Discussion and Team based learning**

		• The students are divided in groups of 3-5 students • Each Group is allotted specific Aushadha yoga • Students refer and compile the material from library sources and prepare a presentation • Each group will present the allotted topic in class • Students are encouraged to interact with the presenter under the supervision of the mentor • Mentor clears the doubts, answers the queries and gives the concluding remarks 1. Ekala Aushadha Yoga (single drug therapy) for Jarajanya vikara with appropriate anupana: • Vidari • Shatavari • Ashvagandha • Jivanti • Madhuka 2.Aushadha Kalpa prayoga with appropriate matra, anupana , sevana kala for following: • Yashtimadhu churna • Guduchi swarasa • Ashvagandhai churna • Shatavrayadi churna • Vidryadi churna 3.Naimittika Rasayana for Jarajanya vikara
NLHT 25.2	Aushadha prayoga for Indriyapradoshoja vikara	Group Discussion and Team based learning • The students are divided in groups of 3-5 students

		• Each Group is allotted specific Aushadha yoga • Students refer and compile the material from library sources and prepare a presentation • Each group will present the allotted topic in class • Students are encouraged to interact with the presenter under the supervision of the mentor • Mentor clears the doubts, answers the queries and gives the concluding remarks 1.Ekala Aushadha Yoga (single drug therapy) for Indriyapradoshaja vikara with appropriate anupana: • Daruharidra • Haritaki • Vibhitaki • Amalaki • Pippali 2.Aushadha Kalpa prayoga with appropriate matra, anupana , sevana kala for following: • Ksheerbala tail • Sarivadi vati • Chavayanprakash • Bilva tail • Triiphala churna 3. Naimittika Rasayana for Indriyapradoshaja vikara.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 25.1	Case study/ case scenario to devise a treatment	Documentation of a case/condition requiring Jarajanya vikara and Indriyapradoshaja vikara

	plan according to principles of Jarajanya vikara and Indriyapradoshaja vikara	Clinical case study (2 Long cases x 2 hours = 4 hours per batch) Case based learning Refer the case taking framework as described in NLHP 3.1
NLHP 25.2	An insight into functionality of a senior citizens' home/Geriatric care center.	Field visit (4 hours) Community based learning Students are taken to nearest senior citizens' home/Geriatric care center. . • They observe the inmates of the facility and identify various age related disorders and their management. • Students make a brief report about visit. • The report is be presented by the students and assessed by the Mentors followed by concluding remarks.
NLHP 25.3	Public awareness activity related to age related diseases.	Commemoration of International day of older people and Screening health camp (4 hours) Community based learning Students are encouraged to conduct public awareness programs using suitable mass communication, audio-visual aids consisting the information of age related disorders , Preventive and therapeutic aspect of age related diseases.

Table 4 : NLHT Activity

(*Refer table 3 of similar activity number)

Activity No*	CO No	Activity details
1.1	CO1	Selection of the appropriate treatment for a simulated case, enacted role play
3.1	CO1,CO2	Clinical understanding of Nija jvara,Sannipataja jvara and Agantuja jvara and its Chikitsa yojana
3.2	CO1,CO3	Importance of Langhana Chikitsa in Jvara
3.3	CO1,CO2	Clinical understanding and treatment of Jvara according to its different stages(Avasthanusara Jvara chikitsa)
3.4	CO1,CO3	Clinical understanding and management of Dhatugata jvara,Vishama jvara and Punaravartaka jvara
3.5	CO1,CO3	Understanding the Nidana panchaka and framing the management of various varieties of Jvara through case scenario.
3.6	CO1,CO3	Importance of Ksheera prayoga and Ghrita prayoga in Jvara
3.7	CO1,CO3	Phalashruti,Sevanakala,Matra,Anupana of the given Aushadha kalpana • Shadanga paneeya • Amritottaram Kashaya • Indukantam Kashaya • Vishamajvara nashaka kashaya • Sudarshana churna • Mrityunjaya rasa • Amritarishta • Pippalyadi Ghrita • Aparajita dhoopa
4.1	CO1,CO2	Understanding of Samprapti vighatana in Anukta roga
5.1	CO1,CO2,CO3	Approach to the diagnosis and management of Mastishkavarana shotha jvara(Meningitis) Mastishka shotha(Encephalitis) and Dhanurvaata(Tetanus
5.2	CO1,CO2,CO3	

		Approach to the diagnosis and management of Granthika sannipata jvara(Plague) and Leptospirosis
5.3	CO1,CO2,CO3	Approach to the diagnosis and management of Beejanu jvara (Anthrax), and Peeta jvara (Yellow fever)
5.4	CO1,CO2,CO3	Approach to the diagnosis and management of Sandhiga sannipata jvara (Chikungunya) Dandaka jvara(Dengue) and Shleepada (Filariasis),
6.1	CO2,CO6	An insight into Anuvanshika rakta vikara (Haematopoietic diseases) and their chikitsa.
6.2	CO1,CO2,CO6	Leukemia and its treatment
6.3	CO1,CO2,CO6	Haemoglobinopathies
6.4	CO2,CO6	Common Cardiovascular Diseases
6.5	CO1,CO2,CO6	Diagnosis and treatment of Raktapravaha-hinata-janya hridroga with special reference to Coronary Artery Diseases
6.6	CO1,CO2,CO6	Diagnosis and management of Raktaja Hridghaatah and Hritpaatah (Congestive Cardiac failure, Cardiac arrest and Conductive disorders of the Cardia)
7.1	CO2,CO6	Disorders of Coagulation
7.2	CO2,CO6	Acquired disorders of coagulation

7.3	CO1,CO2,CO6	Contemporary understanding of Visarpa along with its management
7.4	CO1,CO3	Kushtha bheda and doshahara chikitsa
7.5	CO1,CO2,CO6	Diagnosis and treatment of Leprosy and Vitiligo/Leukoderma
7.6	CO1,CO2,CO6	A diagnostic and treatment approach to Yakrut shotha w.s.r to Infective and Non-Infective Hepatitis.
7.7	CO1,CO2,CO6	An Insight into Yakrut vikara (common liver disorders) and their management
7.8	CO1,CO2,CO6	Maladies and remedies of Gout with special reference to Vatarakta
7.9	CO1,CO2,CO3	Management of peripheral vascular disorders
7.10	CO1,CO2,CO6	Article review on Tvak vikara
7.11	CO1,CO2,CO6	Diagnosis and treatment of Tvak vikara (Common Dermatological conditions in clinical practice)
8.1	CO1,CO2,CO3,CO6	Photography competition to familiarize the students with diagnosis and treatment of Kshudra roga.
9.1	CO1,CO3	Presenting the Phalashruti, Matra, Anupana and Sevana kala of Aushadha yoga for Sthoulya and Prameha

9.2	CO1,CO2,CO3	Detailed understanding of dyslipidemia and Obesity and its ayurvedic management
10.1	CO1,CO2,CO3	Identifying the occurrence of Iatrogenic Disease & assessment of the benefits of Shuddha chikitsa & ill effects of Ashuddha chikitsa
11.1	CO1,CO2,CO3	Gata vata Chikitsa
11.2	CO1,CO3,CO4	Chikitsa yojana in Vatavyadhi
11.3	CO1,CO3	Symposium on Urustambha
11.4	CO1,CO3,CO4	Understanding of Udavarta and its application
11.5	CO1,CO2,CO3	Detailed understanding of Guillain- Barre Lakshana samuchchaya (Guillain -Barre syndrome),Ajna Nadi Vikara (Motor Neuron Disease),,Anuprasthiyasitamajjachadda shotha (Transverse Myelitis),Peshi dourbalya (Myasthenia Gravis)
11.6	CO1,CO2,CO3	Understanding of Cerebrovascular Accident and its management
12.1	CO1,CO2	Discussion on Asthisankatarbuda(Osteosarcoma)
12.2	CO1,CO2,CO3,CO4	Discussion on the etiopathogenesis, Diagnosis and Management of Osteoarthritis
12.3	CO1,CO2,CO3	Detailed understanding of the Diagnosis, Clinical examination, ayurvedic perspective and management of Lumbar spondylosis and Cervical Spondylosis
12.4	CO1,CO2,CO3,CO4	Ayurvedic management of Asthimajjavaha srotodushti vikara based on interpretation of Radiological Investigations
13.1	CO1,CO3,CO4	Chikitsa yojana (treatment plan) of Shwasa (SL42)& Hikka (SM74) by
13.2	CO1,CO3,CO4	Chikitsa yojana (treatment plan) of Kaasa Roga (SL41)
13.3	CO1,CO3,CO4	Chikitsa yojana (treatment plan) of or Trirupa , Shadrupa, Ekadasha rupa

		rajyakshama , Anuloma kshaya & Pratiloma kshaya
13.4	CO1,CO3,CO4	Construct Chikitsa yojana (treatment plan) of Urahkshat roga.
14.1	CO1,CO3,CO4	Constructing chikitsa yojana for Shotha roga
14.2	CO1,CO3,CO4	Constructing Chikitsa yojana of Udar roga & Jalodara
15.1	CO1,CO3,CO4	Constructing Chikitsa Yojana for Samprapti vighatana of Mootrakrichchha roga (SM82)
15.2	CO1,CO3,CO4	Constructing Chikitsa Yojana for Samprapti Vighatana of Mootraghaata roga (SM81)
15.3	CO1,CO3,CO4	Constructing chikitsa yojana for samprapti vighatana of Ashmari roga (SM82)
15.4	CO1,CO3	Detailed understanding of management of Pourusha Granthi Vriddhi (BPH) , Pourusha Granthi Arbuda (Ca Prostate) & Apavrukkatva (Nephrotic Syndrome)
16.1	CO1,CO3	Presenting the Phalashruti, Matra, Anupana and Sevana kala of Aushadha yoga for Atisara and Pravahika
16.2	CO1,CO3,CO5	Detailed understanding of Pravahika (dysentery), Raktatisara (ulcerative colitis), Bruhadantra arbuda (colorectal cancer) and its ayurvedic management
16.3	CO1,CO3	Presenting the Phalashruti, Matra, Anupana and Sevana kala of Aushadha for Krimi roga
16.4	CO1,CO3	Presenting the Phalashruti, Matra, Anupana and Sevana kala of Aushadha for Arsha
17.1	CO1,CO3	Clinical application of Aushadha yoga based on different Kalpana in Annavaha srotodushti vikara.
17.2	CO1,CO2,CO4	Discussion on Chikitsa of Agniyashaya Shotha(Pancreatitis) and Pittashaya Shotha(Cholecystitis

17.3	CO1,CO2,CO3	Compilation of scientific research articles on Irritable Bowel Syndrome/ (Grahani)
17.4	CO1,CO2,CO3	Brainstorming on Etiopathogenesis, Diagnosis & Management of Urdhwaga Amlapitha(GERD), , Parinama shoola and Annadrava shoola(Acid Peptic Diseases)
18.1	CO1,CO2	Bhutonmada and its basic management.
18.2	CO1,CO3	Aushadha prayoga for Manasa roga
18.3	CO1,CO2,CO3	Detailed discussion on Obsessive compulsive disorder, Neurotic disorder, personality and behavioral disorder.
18.4	CO1,CO2,CO3	Detailed discussion on the Diagnosis, Clinical examination and treatment of Vishada (Depression).
19.1	CO1,CO2,CO3,CO6	Hyperpituitarism-Dirghakayata /Atidirgha (Gigantism) and Vikayata (Acromegaly)
19.2	CO1,CO2,CO3,CO6	Udakameha (Diabetes insipidus)
19.3	CO1,CO2,CO3,CO6	Hypoparathyroidism and Hyperparathyroidism
19.4	CO1,CO2,CO3,CO6	Hypopituitarism-Vamanatva (Dwarfism) (SP9Y)
20.1	CO1,CO2,CO3	Approach to the Diagnosis, Ayurvedic perspective and management of Crohn's disease
20.2	CO1,CO2,CO3	Approach to the Diagnosis, Ayurvedic perspective and management of Ankylosing Spondylitis
20.3	CO1,CO2,CO3	Approach to the Diagnosis, Ayurvedic perspective and management of Multiple sclerosis

20.4	CO1,CO2,CO3	Approach to the Etiopathogenesis, Diagnosis, Ayurvedic perspective and management of Rheumatoid Arthritis
21.1	CO2,CO4	Understanding the Applied clinical anatomy and endocrinology aspects for male reproduction
21.2	CO2,CO4	Understanding on the Diagnosis, Clinical examination and Ayurvedic perspective and Principles of management of Male hypogonadism, and Infertility
21.3	CO1,CO3,CO4	Presenting the Phalashruti, Matra, Anupana and Sevana kala of Aushadha yoga in Shukravaha Srotas vikara
21.4	CO1,CO2,CO3,CO4	Detailed understanding on the Diagnosis, Clinical examination and Ayurvedic perspective and principles of management of Male hypogonadism, Infertility and Beeja dushtijanya vikara
22.1	CO1,CO2,CO3,CO6	Differentiating between the Chikitsa of Guhya roga
22.2	CO1,CO2,CO3,CO6	Chikitsa of Guhya roga
23.1	CO1,CO3,CO4	Mono Drug Vajikarana therapy like - Shilajatu, Suvarna bhasma and Vanga bhasma
23.2	CO1,CO3,CO4	Vajikarana ghruta, Vrishya ghruta, Vrishya gutika & Shrigopal taila in Vajikarana Prayoga
23.3	CO1,CO3,CO4	Vajikarana Yoga - Madanakameshwara Lehya, Narasimha Rasayan & Brimhani Gulika.
24.1	CO1,CO3,CO4	Application of the properties of the single herbs for using them as Rasayana
24.2	CO1,CO3,CO4	Evidence based therapeutic effects of Rasayana
24.3	CO1,CO3,CO4	Utility of Naimittika Rasayana in a treatment protocol
24.4	CO1,CO3,CO4	Planning of Apunarbhava Chikitsa applying the principles & procedures of

		Rasayana Therapy
25.1	CO1,CO3	Aushadha prayoga for Jarajanya roga
25.2	CO1,CO3	Aushadha prayoga for Indriyapradoshoja vikara

Table 5 : List of Practicals

(*Refer table 3 of similar activity number)

Practical No*	CO No	Practical Activity details
2.1	CO7	Communication skill and professionalism
2.2	CO7	Ethical Principles in Clinical Practice
3.1	CO1,CO2,CO3,CO6, CO7	Diagnose and constuct the Chikitsa yojana of Jvara(Nava jvara/Purana jvara/Nija jvara/Sannipata jvara/Agantuja jvara/Dhatugata jvara/Vishama jvara/Punaravartaka jvara)
4.1	CO1,CO2	Chikitsa yojana of Anukta roga & its complications
5.1	CO1,CO2,CO3	Bedside case taking of the given Sankramika jvara
5.2	CO1,CO2,CO3	Public awareness activity related to Malaria/hepatitis/epidemic preparedness/vaccination/meningitis/encephalitis
6.1	CO2,CO5,CO6	Cardio Pulmonary Resuscitation (CPR) Description
6.2	CO1,CO2,CO3,CO6, CO7	Short cases presentation in Rasa pradoshaja vikara
6.3	CO1,CO2,CO3,CO6, CO7	Long cases presentation in Rasapradoshaja vikara
7.1	CO1,CO2,CO3,CO6, CO7	Short cases presentation in Rakta Pradoshaja Vikara
7.2	CO1,CO2,CO3,CO6, CO7	Long cases presentation in Rakta Pradoshaja Vikara
7.3	CO7	Commemoration of day of medical importance
8.1	CO1,CO2,CO3,CO6, CO7	Clinical case study on Kshudra roga.
9.1	CO1,CO3,CO5	Bedside case taking of of Galaganda / Gandamala /Sthoulya / Karshya/ Prameha

9.2	CO1,CO3,CO5	Public awareness activity related to World cancer day / Obesity Day/Diabetes Day
10.1	CO1,CO2,CO3	Chikitsa yojana for Drug induced Iatrogenic Disease
11.1	CO1,CO2,CO3,CO6, CO7	Bedside casetaking of Pakshagatha, Ardita, Avabahuka/Viswachi,Kampavata, Gridhrasi, Manyasthmba,Khanja/ Pangu, Padadaha/ Padaharsha
11.2	CO1,CO3	Selection of appropriate Aushadhi in Vatavyadhi
11.3	CO1,CO2,CO3,CO6, CO7	Commemoration of World Stroke Day
11.4	CO1,CO2,CO3,CO5, CO6,CO7	Commemoration of World arthritis day
12.1	CO1,CO2,CO3,CO6, CO7	Bedside case taking of 1.Sandhigata vata 2 Kateegraha 3.Greeva graha 4.Raktaheenatajanya dhatunasha(AvascularNecrosis)/ Kroshtuka sheersha/Asthikshaya
12.2	CO1,CO2,CO3,CO4	Commemoration of World spine day(Oct 16)
13.1	CO1,CO2,CO3,CO6, CO7	Bedside demonstration of a case of Mahashwasa, Urdhwa shwasa, Chhinna Shwasa, Kshudra Shwasa. (Any one case)
13.2	CO1,CO2,CO3,CO6, CO7	Bedside case demonstration of case of Kaasa Roga (SL41)
13.3	CO1,CO2,CO3,CO6, CO7	Bedside demonstration of case of Tamaka Shwasa (SL42)
13.4	CO1,CO2,CO3,CO6, CO7	Bedside case demonstration of a case of Rajayakshma (~Pulmonary Tuberculosis) (2 hours)
13.5	CO1,CO2,CO3,CO6, CO7	Bedside demonstration of a case of Jirna Shwasakrichchhanika (ChronicObstructive Pulmonary Disease)
13.6	CO1,CO2,CO3,CO6, CO7	Bedside demonstration of case of Vispharah (Bronchiectasis)
13.7	CO1,CO2,CO3,CO6, CO7	Bedside Case demonstration of case of Phuphphusaasruti (Pleural effusion)
13.8	CO1,CO2,CO3,CO6,	Bedside demonstration of case of Antaraalayi Phuphphusa Vikara (Interstitial

	CO7	Lung Disease)
13.9	CO1,CO2,CO3,CO5, CO6,CO7	Field visit to DOTs Centre
13.10	CO1,CO2,CO5	Demonstration of Nebulization & oxygen therapy (2 hours)
14.1	CO1,CO2,CO3,CO6, CO7	Bedside demonstration of a case of Vatodara- Pittodara- Kaphodara- Dushyodara
14.2	CO1,CO2,CO3,CO6, CO7	Bedside demonstration of case of Yakritodara & Pleehodara, Chhidrodara, Baddha gudodara.
14.3	CO1,CO2,CO3,CO6, CO7	Bedside demonstration of case of Jalodara
14.4	CO1,CO3,CO4,CO6, CO7	Bedside demonstration of case of Shotha roga
15.1	CO1,CO2,CO3,CO6, CO7	Bedside demonstration of a case of CKD
15.2	CO1,CO2,CO3,CO6, CO7	Bedside demonstration of a case of Mootrakrichcha
15.3	CO1,CO2,CO5	Bedside demonstration of indwelling Urethral Catheter Insertion, managing problems due to Indwelling Catheters and removing Indwelling Urethral catheters.
15.4	CO1,CO2,CO3,CO6, CO7	Bedside demonstration of a case of Mootraghata
16.1	CO1,CO3,CO5	Bedside Case taking of Atisara , Pravahika ,Arsha, Raktatisara and Krimi
16.2	CO1,CO5	Public awareness activity related to World colorectal cancer awareness day/world IBS day/World piles day
17.1	CO1,CO2,CO3,CO6, CO7	Bedside Case taking of Annavaha srotodushti vikara.
17.2	CO1,CO2,CO3,CO6, CO7	OP-based case taking of two Annavahasrotodushti vikara
17.3	CO1,CO2,CO5	Insertion of Nasogastric tube/ Ryles tube in a Mannequin
18.1	CO1,CO2,CO3,CO6, CO7	Case study/ case scenario to devise a treatment plan according to principles of Manovaha srotas Documentation of a case/condition requiring manovaha srotas
18.2	CO2,CO6	Public awareness activity related to Mental health day.

18.3	CO1,CO2,CO3,CO7	An insight into functionality of a mental hospital /de-addiction center/psycho social rehabilitation center.
19.1	CO1,CO2,CO3,CO6, CO7	Case taking of Endocrine disorder. Case presentation of Endocrine disorder
20.1	CO1,CO2,CO3	Bed side Case Presentation on Immune system disorders
21.1	CO1,CO2,CO3,CO4, CO5	Bedside case taking of case of Klaibya (Male sexual dysfunction), Shukradosha
22.1	CO1,CO2,CO6,CO7	Creating awareness about Sexually transmitted diseases during National STD Awareness week.
23.1	CO1,CO3,CO4	Formulate a treatment plan according to principles of Vajikarana.
23.2	CO1,CO3,CO4	Constructing a Chikitsa yojana based on the Interpretation of the Investigations related to Male & Female Infertility
24.1	CO1,CO3,CO4	Devise a treatment plan according to principles of Rasayana.
24.2	CO1,CO3,CO4	Formulate a treatment plan using appropriate enlisted Rasayana
25.1	CO1,CO2,CO3,CO6, CO7	Case study/ case scenario to devise a treatment plan according to principles of Jarajanya vikara and Indriyapradoshaja vikara
25.2	CO1,CO2,CO3	An insight into functionality of a senior citizens' home/Geriatric care center.
25.3	CO2,CO7	Public awareness activity related to age related diseases.

Table 6 : Assessment Summary: Assessment is subdivided in A to H points

6 A : Number of Papers and Marks Distribution

Subject Code	Papers	Theory	Practical/Clinical Assessment (200)					Grand Total
			Practical	Viva	Elective	IA	Sub Total	
AyUG-KC	3	300	100	70	-	30	200	500

6 B : Scheme of Assessment (Formative and Summative)

PROFESSIONAL COURSE	FORMATIVE ASSESSMENT			SUMMATIVE ASSESSMENT
	First Term (1-6 Months)	Second Term (7-12 Months)	Third Term (13-18 Months)	
Third	3 PA & First TT	3 PA & Second TT	3 PA	**UE****

PA: Periodical Assessment; **TT:** Term Test; **UE:** University Examinations; **NA:** Not Applicable.
****University Examination shall be on entire syllabus

6 C : Calculation Method for Internal assessment Marks

TERM	PERIODICAL ASSESSMENT*					TERM TEST**	TERM ASSESSMENT	
	A 11	B	C	D	E	F	G	H
	1 (15 Marks)	2 (15 Marks)	3 (15 Marks)	Average (A+B+C/3)	Converted to 30 Marks (D/15*30)	Term Test (Marks converted to 30)	Sub Total _/60 Marks	Term Assessment (…./30)
FIRST							E+F	(E+F)/2
SECOND							E+F	(E+F)/2
THIRD						NIL		E
Final IA	Average of Three Term Assessment Marks as Shown in 'H' Column.							
	Maximum Marks in Parentheses *Select an Evaluation Method which is appropriate for the objectives of Topics from the Table 6 D for Periodic assessment. Conduct 15 marks assessment and enter marks in A, B, and C. ** Conduct Theory (100 Marks)(MCQ(20*1 Marks), SAQ(8*5), LAQ(4*10)) and Practical (100 Marks) Then convert to 30 marks.							

6 D : Evaluation Methods for Periodical Assessment

S. No.	Evaluation Methods
1.	Practical / Clinical Performance
2.	Viva Voce, MCQs, MEQ (Modified Essay Questions/Structured Questions)
3.	Open Book Test (Problem Based)
4.	Summary Writing (Research Papers/ Samhitas)
5.	Class Presentations; Work Book Maintenance
6.	Problem Based Assignment
7.	Objective Structured Clinical Examination (OSCE), Objective Structured Practical Examination (OPSE), Mini Clinical Evaluation Exercise (Mini-CEX), Direct Observation of Procedures (DOP), Case Based Discussion (CBD)
8.	Extra-curricular Activities, (Social Work, Public Awareness, Surveillance Activities, Sports or Other Activities which may be decided by the department).
9.	Small Project
10.	Activities Indicated in Table 3 - Column G3 as per Indicated I, II or III term in column I3.

Topics for Periodic Assessments

PA	Paper 1	Paper 2	Paper 3
PA 1	Topic 1,2	Topic 11	-
PA 2	Topic 3,4	-	-
PA 3	Topic 5	-	Topic 17
Term test 1	Entire Syllabus of Term 1 of 3 papers		
PA 4	Topic 6	Topic 12	Topic 18
PA 5	-	Topic 13	Topic 19
PA 6	Topic 7	-	Topic 20
Term test 2	Entire Syllabus of Term 2 of 3 papers		
PA 7	Topic 8	Topic 14	Topic 21,22.
PA 8	Topic 9	Topic 15	Topic 23
PA 9	Topic 10	Topic 16	Topic 24,25

6 E : Question Paper Pattern

III PROFESSIONAL BAMS EXAMINATIONS
AyUG-KC
PAPER-I
Time: 3 Hours Maximum Marks: 100
INSTRUCTIONS: All questions compulsory

		Number of Questions	**Marks per question**	**Total Marks**
Q 1	MULTIPLE CHOICE QUESTIONS (MCQ)	20	1	20
Q 2	SHORT ANSWER QUESTIONS (SAQ)	8	5	40
Q 3	LONG ANSWER QUESTIONS (LAQ)	4	10	40
				100

Similar for Paper II & III

6 F : Distribution of theory examination

Paper 1 (Vyadhi Vishesha Chikitsa - 1)					
Sr. No	**A List of Topics**	**B Marks**	**MCQ**	**SAQ**	**LAQ**
1	**Kaya, Chikitsa and Kayachikitsa - Nirukti, Paribhasha, Paryaya and Bheda**	3	Yes	No	No
2	**Clinical ethics in the practice of Kayachikitsa**	7	Yes	Yes	No
3	**Samprapti vighatana, Chikitsa sutra, Chikitsa, Aushadha yoga and Pathyaapathya of Jvara (SP51/TM2)**	22	Yes	Yes	Yes
4	**Anuktaroga treatment principles based on Doshadushyadi vivechana**		Yes	Yes	No
5	**Chikitsa of Sankramika jvara**		Yes	Yes	Yes
6	**Chikitsa of Rasa pradoshaja vikara**	18	Yes	Yes	Yes
7	**Chikitsa of Rakta pradoshaja vikara**	24	Yes	Yes	Yes
8	**Chikitsa of Kshudra roga**	5	Yes	Yes	No
9	**Chikitsa of Mamsapradoshaja and Medopradoshaja vikara**	16	Yes	Yes	Yes
10	**Shuddha-Ashuddha chikitsa, Chikitsajanita vikara**	5	Yes	Yes	No
Total Marks		**100**			

Paper 2 (Vyadhi Vishesha Chikitsa - 2)					
Sr. No	**A List of Topics**	**B Marks**	**MCQ**	**SAQ**	**LAQ**
11	**Chikitsa of Vatavyadhi**	24	Yes	Yes	Yes
12	**Chikitsa of Asthi-Majja pradoshaja vikara (SR54) (SR55)**	14	Yes	Yes	Yes
13	**Chikitsa of Pranavaha Srotodushti Vikara (TM2:SL40-SL4Z)**	24	Yes	Yes	Yes
14	**Chikitsa of Udakavaha srotodushti vikara**	10	Yes	Yes	Yes
15	**Chikitsa of Mootravaha srotodushti vikara**	12	Yes	Yes	Yes
16	**Chikitsa of Purishavaha srotodushti vikara (SR5A)**	16	Yes	Yes	Yes
Total Marks		**100**			

Paper 3 (Vyadhi Vishesha Chikitsa Evam Rasayana, Vajikarana)					
Sr. No	**A List of Topics**	**B Marks**	**MCQ**	**SAQ**	**LAQ**

17	**Chikitsa of Annavaha srotodushti vikara**	16	Yes	Yes	Yes
18	**Chikitsa of Manovaha srotas dushti vikara**	10	Yes	Yes	Yes
19	**Chikitsa of of Antahsravi Granthi vyadhi**	10	Yes	Yes	Yes
20	**Chikitsa of Vyadhikshamatva vikara**	8	Yes	Yes	No
21	**Chikitsa of Shukravaha srotasa vikara**	8	Yes	Yes	No
22	**Chikitsa of Guhya roga**	8	Yes	Yes	No
23	**Vajikarana**	12	Yes	Yes	Yes
24	**Rasayana**	20	Yes	Yes	Yes
25	**Chikitsa of Jarajanya vikara and Indriyapradoshaja vikara**	8	Yes	Yes	No
Total Marks		**100**			

6 G : Instructions for UG Paper Setting & Blue print

1. All questions shall be compulsory.
2. Questions shall be drawn based on Table 6F, which provides the topic name, types of questions (MCQ(Multiple Choice Question), SAQ(Short Answer Question), LAQ(Long Answer Question)).
3. The marks assigned in Table 6F for each topic/group of topics shall be considered as the maximum allowable marks for that topic/group of topics.
4. Ensure that the total marks allocated per topic/group of topics do not exceed the limits specified in Table 6F.
5. Refer to Table 6F before setting the questions. Questions shall be framed only from topics where the type is marked as “YES”, and avoided if marked as “NO”.
6. Each 100-mark question paper shall contain:
   - 20 MCQs
   - 8 SAQs
   - 4 LAQs

7. MCQs:
   - Majority shall be drawn from the Must to Know part of the syllabus.
   - Questions from the Desirable to Know part of syllabus shall not exceed 3.
   - Questions from the Nice to Know part of syllabus shall not exceed 2.

8. SAQs:
   - Majority shall be drawn from the Must to Know part of the syllabus.
   - Questions from the Desirable to Know part of syllabus shall not exceed 1.
   - No questions shall be drawn from the Nice to Know part of syllabus.
   - SAQs shall assess understanding, application, and analysis, rather than simple recall.

9. LAQs:
   - All LAQs shall be drawn exclusively from the Must to Know part of the syllabus.
   - No questions shall be taken from the Desirable to Know or Nice to Know part of the syllabus.
   - Number of LAQs should not exceed one per topic unless maximum marks exceed 20 for the topic.

10. Long Answer Questions shall be structured to assess higher cognitive abilities, such as application, analysis, and synthesis.
11. Follow the guidelines in User Manual III for framing MCQs, SAQs, and LAQs.

6 H : Distribution of Practical Exam

S.No	Heads	Marks
1	Long case 15 marks for case writing + 15 marks for case presentation + 15 marks for bedside viva-voce	45
2	Short case 10 marks for Case writing + 5 marks for case presentation + 10 marks for bedside viva-voce	25
3	Spotting (Assessing Skills - Any 5) • Ryle's tube • Rubber catheter • Foley's catheter • Nebulizer • HFNC mask • Ambu bag • Urine bag • Life-saving medicines • Defibrillator • Distilled water • Syringe • Insulin syringe • Intravenous Infusion set • Scalp vein set/ Intravenous cannula • 1 mark each for Identification + 1 mark each for mentioning the important clinical use	10
4	Case records • 20 Long cases (at least one case from each srotas + Antahsravi granthi vikara) +3 Rasayana cases + 2 Vajikarana cases • 20 Short cases (at least one case from each srotas + Kshudra roga) • 5 marks Neatness + 15 marks Case writing skills	20
5	**Viva-Voce** **(The examiner is expected to utilize sufficient time to check students' knowledge across all topics of the syllabus)** **Distribution of viva Marks across 3 papers** **Paper 1 - 20 Marks**	70

	• Derivation, definition, synonyms, and classification of Kaya, Chikitsa, and Kayachikitsa • Clinical Ethics in the practice of Kayachikitsa • Samprapti vighatana, Chikitsa sutra, Chikitsa of Jvara • Anuktaroga treatment principles • Sankramika jvara • Chikitsa of Rasa-pradoshaja vikara • Chikitsa of Rakta-pradoshaja vikara • Chikitsa of Kshudra roga • Chikitsa of Mamsapradoshaja and Medopradoshaja vikara • Concept of Shuddha-ashuddha chikitsa(Iatrogenic diseases) **Paper 2 - 20 marks** • Chikitsa of Vatavyadhi • Chikitsa of Asthi-majja-pradoshaja vikara • Chikitsa of Pranavaha srotodushti vikara • Chikitsa of Udakavaha srotodushti vikara • Chikitsa of Mootravaha srotodushti vikara • Chikitsa of Purishavaha srotodushti vikara **Paper 3 - 20 marks** • Chikitsa of Annavaha srotodushti vikara • Chikitsa of Manovaha srotodushti vikara • Chikitsa of Antahsravi Granthi vikara • Chikitsa of Vyadhikshamata vikara • Chikitsa of Shukravaha srotodushti vikara • Chikitsa of Guhya roga • Vajikarana • Rasayana • Chikitsa of Jarajanya and Indriyapradoshaja vikara **Communication Skills - 10 Marks**	
6	Internal Assessment	30
Total Marks		**200**

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Abbreviations

Domain		T L Method		Level		Assessment		Integration	
CK	Cognitive/Knowledge	L	Lecture	K	Know	T-CS	Theory case study	V-RS	V RS
CC	Cognitive/Comprehension	L&PPT	Lecture with PowerPoint presentation	KH	Knows how	T-OBT	Theory open book test	V-KS	V KS
CAP	Cognitive/Application	L&GD	Lecture & Group Discussion	SH	Shows how	P-VIVA	Practical Viva	H-KC	H KC
CAN	Cognitive/Analysis	L_VC	Lecture with Video clips	D	Does	P-REC	Practical Recitation	H-SH	H SH
CS	Cognitive/Synthesis	REC	Recitation			P-EXAM	Practical exam	H-PK	H PK
CE	Cognitive/Evaluation	SY	Symposium			PRN	Presentation	H-SHL	H SHL
PSY-SET	Psychomotor/Set	TUT	Tutorial			P-PRF	Practical Performance	H-SP	H SP
PSY-GUD	Psychomotor/Guided response	DIS	Discussions			P-SUR	Practical Survey	H-KB	H-KB
PSY-MEC	Psychomotor/Mechanism	BS	Brainstorming			P-EN	Practical enact	H-Samhita	H-Samhita
PSY-ADT	Psychomotor Adaptation	IBL	Inquiry-Based Learning			P-RP	Practical Role play	V-DG	V DG
PSY-ORG	Psychomotor/Origination	PBL	Problem-Based Learning			P-MOD	Practical Model	V-RN	V RN
AFT-REC	Affective/ Receiving	CBL	Case-Based Learning			P-POS	Practical Poster	V-RS	V RS
AFT-RES	Affective/Responding	PrBL	Project-Based Learning			P-CASE	Practical Case taking	V-AT	V AT
AFT-VAL	Affective/Valuing	TBL	Team-Based Learning			P-ID	Practical identification	V-SW	V SW
AFT-SET	Affective/Organization	TPW	Team Project Work			P-PS	Practical Problem solving		
AFT-CHR	Affective/ characterization	FC	Flipped Classroom			QZ	Quiz		
PSY-PER	Psychomotor/perception	BL	Blended Learning			PUZ	Puzzles		
PSY-COR	Psychomotor/ Complex Overt Response	EDU	Edutainment			CL-PR	Class Presentation		
		ML	Mobile Learning			DEB	Debate		
		ECE	Early Clinical Exposure			WP	Word puzzle		
		SIM	Simulation			O-QZ	Online quiz		
		RP	Role Plays			O-GAME	Online game-based assessment		
		SDL	Self-directed learning			M-MOD	Making of Model		
		PSM	Problem-Solving Method			M-CHT	Making of Charts		
		KL	Kinaesthetic Learning			M-POS	Making of Posters		

		W	Workshops			C-INT	Conducting interview		
		GBL	Game-Based Learning			INT	Interactions		
		LS	Library Session			CR-RED	Critical reading papers		
		PL	Peer Learning			CR-W	Creativity Writing		
		RLE	Real-Life Experience			C-VC	Clinical video cases		
		PER	Presentations			SP	Simulated patients		
		D-M	Demonstration on Model			PM	Patient management problems		
		PT	Practical			CHK	Checklists		
		X-Ray	X-ray Identification			Mini-CEX	Mini-CEX		
		CD	Case Diagnosis			DOPS	DOPS		
		LRI	Lab Report Interpretation			CWS	CWS		
		DA	Drug Analysis			RS	Rating scales		
		D	Demonstration			RK	Record keeping		
		D-BED	Demonstration Bedside			COM	Compilations		
		DL	Demonstration Lab			Portfolios	Portfolios		
		DG	Demonstration Garden			Log book	Log book		
		FV	Field Visit			TR	Trainers report		
						SA	Self-assessment		
						PA	Peer assessment		
						360D	360-degree evaluation		
						PP-Practical	Practical		
						VV-Viva	Viva		
						DOAP	Demonstration Observation Assistance Performance		
						SBA	Scenario Based Assessment		
						CBA	Case based Assessment		
						S-LAQ	Structured LAQ		
						OSCE	Observed Structured Clinical Examination		
						OSPE	Observed Structured Practical Examination		
						DOPS	Direct observation of procedural skills		

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INDEX

Sr no	Topic	Date	Page no
1			
2			
3			
4			

Components of Record with instructions

1. **Medical Equipment**

   Identify and write the clinical uses of the given medical equipment in the given format.

- Name of the equipment
- Clinical uses

List of medical equipments

- Ryle's tube
- Rubber catheter
- Foley's catheter
- Nebulizer
- HFNC mask
- Ambu bag
- Urine bag
- Defibrillator
- Distilled water
- Syringe
- Insulin syringe
- Intravenous Infusion set
- Scalp vein set/ Intravenous cannula

2. **Life-saving medicines**
   a. Name of the medicine
   b. Indications of the medicine
   c. Contraindications of the medicine
   d. Clinical use, dose, and the medicine's delivery mode.
3. **Medical procedure**

Format for Procedure Writing:

Detailed description of Essential Competency-Based Procedures

- Name of the procedure:
- Indications:
- Contraindications:
- Preparatory Steps (Poorva Karma):

- Main Procedure (Pradhana Karma):
- Post-Procedure Care (Pashchat Karma):
- Precautions, Possible Complications, and Management:
- The student must perform the procedure at least 3 times and be certified by the mentor.

List of procedures /Skill lab activities

- Insertion of Nasogastric tube/ Ryle's tube in a Mannequin
- Insertion and removal of an indwelling Urethral Catheter
- Nebulization
- Oxygen therapy
- Cardiopulmonary Resuscitation (CPR)

4. Field visits

A. Visit Details:

a. Date:

b. Location (Name and address):

c. Objectives of the visit:

d. Duration of the visit:

e. Name of facilitators of the Visit:

B. Observations of the visit

a. Brief Summary of the visit:

b. Learnings from the visit:

c. Future applications:

d. Areas for Improvement:

C. Conclusion

Evaluation of the visit (Effectiveness in meeting visit objectives)

D. Pasting the Geotagged photographs of the Visit

- DOTs Centre (Please refer to NLHP13.9)
- Mental Hospital /De-addiction center/Psycho-social rehabilitation center. (Please refer to NLHP18.2)
- Senior citizens' home/Geriatric care center. (Please refer to NLHP 25.2)

5. Commemoration of medically important days

- Name of the international day

- Date of observation
- Organization body (UN/WHO/UNESCO)
- Official theme (if any)
- Significance of the day (Why is it celebrated, Key message and awareness points)
- Activity title and type
- Objective (What the participants learn/achieve)

- World malaria day /World dengue day /World hepatitis day /day of Epidemic preparedness /National vaccination day /World meningitis day /World encephalitis day (Please refer to NLHP 5.2)
- World Liver Day/ World Hepatitis Day (Please refer to NLHP 7.3)
- World Cancer Day / Obesity Day/Diabetes Day (Please refer to NLHP 9.2)
- World Stroke Day (Please refer to NLHP 11.3)
- World Arthritis Day (Please refer to NLHP 11.4)
- World Spine Day (Please refer to NLHP 12.2)
- World Colorectal Cancer Awareness Day/World IBS Day/World Piles Day (Please refer to NLHP 16.2)
- Mental Health Day (Please refer to NLHP 18.3)
- International day of older people (Please refer to NLHP 25.3)
- National STD Awareness Week (Please refer to NLHP 22.1)

6. Scientific Journal Reading and presentation

Students should document the following details in the activity book for the chosen scientific/research article.

a) Name of the research article
b) Name of the author/authors
c) Name of the journal with details of volume, issue
d) Reason for the selection of the particular article
e) Summary of the article in 250-300 words.
f) Merits and limitation of the articles

- Tvak Vikara

- Irritable Bowel Syndrome/ (Grahani)
- Rasayana

7. **Long case (20 Cases) + Rasayana-Vajikarana Cases (5 cases)**
    - 20 Long cases (at least one case from each srotas + Antahsravi granthi Vikara + 2 cases of Manasa roga). Please follow the given template.
    - 3 Rasayana cases + 2 Vajikarana cases (Total 5 cases). Please follow the given template.
8. **Short case (20 Cases)**

    20 Short cases (at least one case from each srotas + Kshudra roga) + Please follow the given template.
9. **NLHT activity**
    - Date of the activity
    - Name of the Activity
    - Role of the student
    - Role of the faculty
    - Assessment – Cognitive Domain
    - Method undertaken
    - Know how/Know
    - Remarks

Uses of Medical Equipment

Write the clinical uses of the given medical equipment.

- **Name of the equipment:**

- **Clinical uses:**

- **Photograph of the equipment:**

List of medical equipments:

- Ryle's tube
- Rubber catheter
- Foley's catheter
- Nebulizer
- HFNC mask
- Ambu bag
- Urine bag
- Defibrillator
- Distilled water
- Syringe
- Insulin syringe
- Intravenous Infusion set
- Scalp vein set/ Intravenous cannula

Uses of the Lifesaving medicine

- **Name of the medicine:**

- **Indications of the medicine:**

- **Contraindications of the medicine:**

- **Clinical use, dose, and the medicine's delivery mode.:**

Medical procedure

- Description of Essential Competency-Based Procedures. (**The student must perform the procedure at least 3 times and be certified by the mentor.)**

- **Name of the procedure:**

- **Indications:**

- **Contraindications:**

- **Preparatory Steps (Poorva Karma):**

- **Main Procedure (Pradhana Karma):**

- **Post-Procedure Care (Pashchat Karma):**

- **Precautions, Possible Complications, and Management:**

List of procedures /Skill lab activities

- Insertion of Nasogastric tube/ Ryle's tube in a Mannequin
- Insertion and removal of an indwelling Urethral Catheter
- Nebulization
- Oxygen therapy
- Cardiopulmonary Resuscitation (CPR)

Field visit

- **Date:**
- **Location (Name and address):**
- **Objectives of the visit:**
- **Duration of the visit:**
- **Name of facilitators of the Visit:**
- **Observations of the visit:**
- **Brief Summary of the visit:**
- **Learnings from the visit:**
- **Future applications:**
- **Areas for Improvement:**

- **Evaluation of the visit (Effectiveness in meeting visit objectives):**

- **Pasting the Geotagged photographs of the Visit:**

List of field visits:

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- Mental Hospital /De-addiction center/Psycho-social rehabilitation center. (Please refer to NLHP18.2)
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Scientific Journal Reading and Presentation

Students should document the following details for the chosen scientific/research article in the activity book.

- **Name of the research article:**

- **Name of the author/authors:**

- **Name of the journal with details regarding volume and issue:**

- **Reason for the selection of the article:**

- **Summary of the article in 250-300 words:**

- **Merits and limitations of the articles:**

List of topics for scientific journal reading and presentations:

- Tvak Vikara
- Irritable Bowel Syndrome/ (Grahani)
- Rasayana

CONTENTS

Serial No.	Vistrita Rugna patraka (Long Case paper)	Page No.
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.		
17.		
18.		
19.		
20.		

Serial No.	Rasayana-Vajikarana Rugna Patraka (Case papers)	Page No.
1.		
2.		
3.		
4.		
5.		

Serial No.	Samkshipta Rugna patraka (Short Case paper)	Page No.
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.		
17.		
18.		
19.		
20.		

Kayachikitsa Vistrita Rugna Patraka (Long Case Paper)

<table>
<tr><td>Kramanka (Case No):</td><td colspan="2">Bahirkramanka (OPD No):</td><td>Antarkramanka (IPD No):
Shayya Kramanka (Bed No):</td></tr>
<tr><td colspan="2">Rugna Nama (Name of the Patient):</td><td>Vaya (Age):</td><td>Linga (Gender): M/F/T</td></tr>
<tr><td>Religion: H/M/S/C/J/O</td><td colspan="3"></td></tr>
<tr><td>Vaivahika sthiti
(Marital Status):</td><td colspan="3">Unmarried/Married/Divorced/Widowhood</td></tr>
<tr><td rowspan="2">Vyavasaya
(Occupation):</td><td colspan="2">Poorva (past):</td><td>Sadhya (present):</td></tr>
<tr><td colspan="2">Avadhi (working hours):</td><td>Vritti swabhava (Nature of work):</td></tr>
<tr><td>Shikshana (Education):</td><td colspan="3">Uneducated/Lower Primary/SSC/PUC/UG/PG</td></tr>
<tr><td>Samajika arthika sthiti
(Socio-economic Status):</td><td colspan="3">Lower/Middle/Upper</td></tr>
<tr><td colspan="3">Sthana (Address):</td><td>Contact No.</td></tr>
<tr><td colspan="2">Pravesha dinanka (Date of admission):</td><td colspan="2">Nirgamana dinanka (Date of discharge):</td></tr>
<tr><td colspan="4">Parinama (Result):</td></tr>
</table>

Pradhana vedana (Chief Complaint): **Kala Prakarsha (Duration):**

Anubandhi vedana (Associated Complaint):

Adyatana vyadhi vrittanta (H/o Present illness):

Saha-vyadhi vrittanta (Comorbidity):

Poorva vyadhi vrittanta (H/o Past illness):

Kautumbika vrittanta (Family history):

	Alive	Dead	Disease	Healthy	Age
Father					
Mother					
Spouse					
Brother					
Sister					
Son					
Daughter					

H/o Tulya gotra vivaha (Consanguinity of marriage): Yes……. /No…….

H/o Kulaja vikara vrittanta (Hereditary diseases): Yes……. /No……

Vaiyaktika vrittanta (Personal history):

Ahara prakara (Dietary habits)-Veg/Nonveg/Mixed

Jala pana (water intake)-Hina/Mithya/Ati

Kshudha (Appetite)-Good/Impaired

Ahara sevana-Alpa/Ati/Adhyashana

Mala pravritti (Bowel movement)-

Koshtha: Mridu/Madhyama/Krura

Mutra pravritti (Micturition)-

Nidra (Sleep)-Sound/Disturbed, H/o Diva swapna / Ratri jagarana

Vyasana (Habits / Addiction)-Tea/Coffee/Smoking/Tobacco chewing/Alcohol/Drugs/None

Smoking-Regular/Occasional/Never Smoked/Ex-smoker

Quantity……./day Duration of smoking……

Alcohol intake - No/Social drinker/Habitual

Quantity……./day Duration of alcohol intake ……

Anurjata (Drug sensitivity)-

Chintadhikya (Mental stress) -

Rajopravritti vrittanta (Menstrual history)-

Rogi Pariksha Vidhi:

a) Samanya Pariksha:

Sharira akriti (Body Built):	Sanjna (Consciousness):	Gati (Gait):
Sharira dairghya (Height): cm	Sharira bhara (Weight): Kg	Panduta (Pallor):
Netra pitavarnata (Icterus):	Nila-shyava varnata (Cyanosis):	Clubbing:
Granthi (Lymphadenopathy):	Shopha (Oedema):	Jihva liptata (Tongue coating):
Nakha (Nails):	Anya (Other findings):	

Vitals:

Temperature: ºF	Heart rate: /min	Pulse rate: /min
Blood pressure: mmHg	Respiratory rate: /min	

b) Samsthanika pariksha/Vishishta pariksha (Systemic Examination):

c) Srotas pariksha:

Srotas	Moolasthana	Darshanagamya Vishaya	Sparshanagamya Vishaya	Prashnagamya Vishaya

d) Ashta sthana pariksha:

Nadi:	Shabda:
Mootra:	Sparsha:
Mala:	Drik:
Jihva:	Akriti:

e) Dashavidha Pariksha:

1. Prakriti									
	Shareerika Prakriti		V	P	K	VP	VK	PK	S
	Manasika Prakriti		Sattva		Rajas		Tamas		
2. Vikriti	Dosha	Shhareerika	V		P		K		
		Manasika	Satvika		Rajasika		Tamasika		
	Dooshya		Rasa	Rakta	Mamasa	Medas	Asthi	Majja	Shukra
	Mala	Pureesha	Frequency		Consistency				
		Mootra	Frequency		Consistency				
		Sweda	Normal		Abnormal				
3. Sara	T	R	M	M	A	M	S	S	
4. Samhanana	Heena		Madhyama		Uttama				

5. Pramana	Heena	Madhyama		Uttama
6. Satmya	Heena	Madhyama		Uttama
7. Ahara Shakti	Abyawarana Shakti	Avara	Madhyama	Pravara
	Jarana Shakti	Avara	Madhyama	Pravara
8. Vyayama Shakti	Heena	Madhyama		Uttama
9. Vaya	Bala	Madhyama		Vriddha
10. Sattva	Heena	Madhyama		Uttama

f) Prayogashaliya Parikshana (Investigations):

Roga Pariksha:

A) Nidanapanchaka

Nidana:

Poorvarupa:

Rupa:

Upashaya/Anupashaya:

Samprapti:

B) Samprapti ghataka

Dosha:

Dushya: Dhatu/Upadhatu/Mala

Srotas:

Srotodushti prakara:

Udbhava sthana:

Sanchara sthana:

Vyakta sthana:

Adhisthana:

Rogamarga:

Vyadhi avastha vishesha (Stage of the disease):

Sama/Nirama Nava/Purana Uttana/Gambhira	**Kevala Dosha/ Samsrushta/Sannipata Dosha**	**Avritta Dosha**

Vyavachedaka Nidana (Differential Diagnosis):

Vyadhi nama (Diagnosis):

Upadrava:

Arishta Lakshana:

Sadhya-Asadhyata:

CHIKITSA

Chikitsa Sootra:

Chikitsa:

1. **Yuktivyapashraya Chikitsa**:

A) Shodhana

Vamana/Virechana/ Basti/ Nasya/Raktamokshana

B) Shamana

Bahya Chikitsa:

Chikitsa	Aushadha	Kala

Abhyantara Chikitsa:

Kalpa	Matra	Kala	Anupana

2. Daivavyapashraya Chikitsa:

3. Satvavajaya Chikitsa:

Pathya/Apathya:

Pathya: Ahara:

Vihara:

Apathya: Ahara:

Vihara:

Dainika Patraka:

Dinanka	Vishesha avastha/ Navina lakshana utpatti	Upayukta aushadha yoga	Parinama

Dainandika akalana (Daily Assessment):

Karya	Dainandika Nireekshana (Daily observation) Prapti/Alpa-prapti/Aprapti									
	1	2	3	4	5	6	7	8	9	10
Ruk Upashamanam (Reduction of Pain)										
Annabhilasha (Desire for the intake of food)										
Bhuktasya paripaka (Proper and easy digestion of the ingested food)										
Srishta vit (Proper evacuation of faeces)										
Srishta mootra(Proper evacuation of urine)										
Srishta vata (Proper evacuation of flatus)										
Shareera laghava (Lightness in the body)										
Prasannendriya (Optimum functioning of sense organs)										
Sukha swapna (Proper timely sleep)										
Vaikarikanam cha swapnam										

adarshanam (Devoid of unpleasant dreams)										
Sukha prabodhanam (Proper timely awakening)										
Bala labha (Gain of strength)										
Varna labha (Improved complexion)										
Swara yoga (Pleasant voice)										
Ayusho labha (Improved quality of life)										
Soumanasyam (Pleasant mind)										
Samagni (Normal digestive fire)										

Karyaphala:

Manobuddhindriyasharira tushti	
Vikara upashamana	
Muchyamana	
Pragunibhava	
Anya	

Vidyarthi Hastakshara **Adhyapaka Hastakshara**

Kayachikitsa Manasa-Roga Rugna Patraka
(Kayachikitsa Manasa-Roga Case Paper)

VITAL DATA

Kramanka (Case No):	Bahirkramanka (OPD No):		Antarkramanka (IPD No): Shayya Kramanka (Bed No):
Rugna Nama (Name of the Patient):		Vaya (Age):	Linga (Gender): M/F/T
Religion: H/M/S/C/J/O			
Vaivahika sthiti (Marital Status):	Unmarried/Married/Divorced/Widowhood		
Vyavasaya (Occupation):	Poorva (past):		Sadhya (present):
	Avadhi (working hours):		Vritti swabhava (Nature of work):
Education:	Uneducated/Lower Primary/SSC/PUC/UG/PG		
Samajika arthika sthiti (Socio-economic Status):	Lower/Middle/Upper		
Sthana (Address):			Contact No.
Pravesha dinanka (Date of admission):		Nirgamana dinanka (Date of discharge):	
Parinama (Result):			

Informant: Self/parents/Relatives/Spouse/friends/Neighbors/other

Name of the informant:

Source of information	Pradhana vedana (Presenting complaints)	Kala prakarsha (Duration)
Patient		
Informant		

Anubandhi vedana (Associate complaints) with the duration:

Adyatana vyadhi vrittanta (History of present illness):

Saha vyadhi vrittanta (Comorbidity):

Poorva-vyadhi vrittanta (history of previous illness):

Psychiatric history:

K/C/O Any psychiatric disease: Yes / No

If yes,

Suicidal behavior: Suicidal ideation - Yes / No Suicidal attempts - Yes /No

No. of attempts:

Reasons:

Other details:

Organic disease history: Yes / No

If yes,

Legal history:	Present/Absent
Drink and drive:	Present/Absent
Any history of road accidents due to alcohol abuse:	Present/absent
Any history of crimes: Sexual offences/Violence/Murders/Fraud:	Present/absent
Any history of legal punishment:	Present/absent

Chikitsa vrittanta (Treatment history):

Treatment taken: Yes/No

If yes;

Previous hospitalization: Yes/No

Kautumbika vrittanta (Family history):

1. Family atmosphere: Harmonious/Complicated
2. Marital disharmony of parents: Yes/No
3. Psychiatric abnormality in the family: Yes/No
4. Organic diseases in the family: Yes/No
5. Family Problems: Yes/No
6. Drug addiction or alcoholic in family: Yes/No
7. Family breakup: Yes/No
8. Death of any Immediate family member(s): Yes/No
9. History of suicide(s) in the family: Yes/No
10. Childhood abuse: Yes/No
11. Tulya gotra vivaha (Consanguinity of marriage): Yes/No
12. Kulaja vikara vrittanta (Hereditary disease): Yes/No
    If yes:
13. Other:
    1) None 2) Displacement in childhood
    3) Children related problems 4) Isolated Family

Family member	Alive	Dead	Disease	Healthy	Age
Father					
Mother					
Spouse					
Brother					
Sister					
Son					
Daughter					

Janma evum balaka vrittanta (Birth and childhood history):

1. Place of birth: Pregnancy: Planned /Unplanned
2. Length of gestation: Gender Acceptance by Family: Yes/No
3. Nature of delivery: Normal/CS/Forceps/Precipitate/Premature/ Post-mature

4. Mother's health during pregnancy: Normal/Abnormal
5. Milestones & Developments: Normal/Delayed
6. Childhood illness: Epilepsy/Meningitis/Encephalitis/Other
7. Playing alone: Yes/No
8. Any particular fear: Yes/No
9. Physical symptoms at the time of stress or unhappiness: Yes/No
10. Any physical disorder: Yes/No
11. Any emotional disorders: Enuresis/Tics/Nail biting/temper tantrum/Head banging/others
12. Any specific: Domestic violence/Harassment/separation from parents/ sibling rivalry: Yes/No

Vartamana samajika sthiti (Present social situation):

1. Social relations: Satisfactory/Unsatisfactory

Vaivahika vrittanta (Marital history):

1. Relationship with Spouse: Satisfactory/Unsatisfactory
2. Discussion with spouse before taking decisions: Present/Absent
3. Sharing responsibilities/household works: Present/Absent
4. Early/Timely/ Late marriage; Arranged marriage / Not with the consent of the family
5. Sexual Satisfaction Present/Absent
6. If divorce, reason:
7. Any Extramarital/Premarital Experiences: Present/Absent
8. Do you have:

Reduced Libido ☐	Excessive Sexual Urge ☐	Complete Abstinence ☐
Erectile Dysfunction ☐	Delayed Ejaculation ☐	Pathological Jealousy ☐

Menstrual and obstetric history:

1. Menarche:
2. Menopause:
3. Menstrual cycle: Days: Regular/Irregular
4. Whether the complaints aggravating during the menstrual period: Yes /No
5. Pre-menstrual syndromes: Yes/No
6. Number of deliveries:
7. Nature of delivery: Normal/C.S./Forceps/Precipitate/Premature/Post-mature
8. Abortion:
9. Other complications:

Personal history:

1. Ahara prakara (Dietary habits): Veg/Mix
   Samashana /Adhyashana/Vishamashana /Pramitashana/Regular/Irregular
2. Supplementary Diets - Tea/Coffee/Cold Drinks /Other Quantity:
3. Kshudha (Appetite)-Good/Impaired
4. Ahara sevana-Alpa/Ati/Adhyashana
5. Jala pana (water intake)-Heena/Mithya/Ati
6. Exercise - Regular/Irregular/No/Less/Proper/Excess

7. Rest_____hrs/day
8. Snana - Daily/Irregular
9. Nidra- Alpa/Prabhuta/Khandita _____hrs/day; _____hrs/night
10. Mala pravritti (Bowel movement)
11. Koshtha: Mridu/Madhyama/Krura
12. Mootra pravritti (Micturition)
13. Anurjata (Drug sensitivity)
14. Hobbies:
15. Vyasana (Addictions): Present/Absent
    If present, Duration: Substance(s): Quantity:

Rogi pareeksha vidhi:

Samanya pareeksha:

Shareera akriti (Body Built):

Samjna (Consciousness):

Gati (Gait):

Shareera dairghya (Height):

Shareera bhara (Weight):

Panduta (Pallor):

Netra peetavarnata (Icterus):

Neela-shyava varnata (Cyanosis):

Clubbing:

Granthi (Lymphadenopathy):

Shopha (Oedema):

Jihva liptata (Tongue coating):

Nakha (Nails):

Anya (Other findings):

Vital signs examination:

Pulse rate	R:	L:
Respiratory rate		
Blood pressure		
Temperature		
Heart rate		

Systemic examination:

1. Respiratory system:

2. Gastrointestinal System:

3. Cardiovascular System:

4. Nervous System:

Ashtasthana pareeksha

Nadi:	Shabda:
Mootra:	Sparsha:
Mala:	Drik:
Jihva:	Akriti:

Dashavidha pareeksha

1. Prakriti									
	Shareerika Prakriti		V	P	K	VP	VK	PK	S
	Manasika Prakriti		Sattva		Rajas		Tamas		
2. Vikriti	Dosha	Shhareerika	V		P		K		
		Manasika	Satvika		Rajasika		Tamasika		
	Dooshya		Rasa	Rakta	Mamasa	Medas	Asthi	Majja	Shukra
	Mala	Pureesha	Frequency		Consistency				
		Mootra	Frequency		Consistency				
		Sweda	Normal		Abnormal				
3. Sara	T	R	M	M	A	M	S	S	
4. Samhanana	Heena		Madhyama		Uttama				
5. Pramana	Heena		Madhyama		Uttama				
6. Satmya	Heena		Madhyama		Uttama				
7. Ahara Shakti	Abyawarana Shakti		Avara		Madhyama		Pravara		
	Jarana Shakti		Avara		Madhyama		Pravara		
8. Vyayama Shakti	Heena		Madhyama		Uttama				
9. Vaya	Bala		Madhyama		Vriddha				
10. Sattva	Heena		Madhyama		Uttama				

Manovaha sroto pareeksha (Mental status examination):

Manovibhrama		
Indriyabhigraha (Perception and motor control)		
Hallucinations	Absent	Present
Illusions	Absent	Present
Manonigraha (Mental Control)	Absent	Present
Chintya (process of thinking) Negatively biased thoughts	Absent	Present
Vicharya (Thoughts)		
Flight of ideas	Absent	Present
Blocking of thoughts	Absent	Present
Thought broadcasting	Absent	Present
Thought control by others	Absent	Present
Obsession and fixed ideas	Absent	Present
Sudden strange ideas	Absent	Present
Oohya		
Pessimistic Speculation	Absent	Present
Dhyeya (Contemplation) Assessment of events hurting, harming, and pessimistic	Absent	Present
Sankalpa (Conviction) pessimistic emotional judgment	Absent	Present
Buddhi vibhrama (Intellectual Capacity)		
Mental deficiency	Absent	Present
General information	Good	Bad
Immature behavior	Absent	Present
Imitation	Absent	Present
Insight	Absent	Present
Judgment	Absent	Present
Delusions	Absent	Present
Samjnajnana vibhrama (Consciousness/Orientation/Responsiveness)		
Orientation to time	Intact	Impaired
Orientation to the place	Intact	Impaired
Orientation to a person	Intact	Impaired
Attention	Absent	Present
Concentration	Absent	Present
Smriti vibhrama (Memory)		
Remote	Absent	Present
Recent	Absent	Present
Immediate	Absent	Present
Bhakti vibhrama (Desire)		
Food	Normal	Impaired

Dress	Normal	Impaired
Sex	Normal	Impaired
Entertainment	Normal	Impaired
Sheela vibhrama (Temperament)		
Change in Emotions like: Elation: Anger: Anxiety: Depression: Fear: Anti-social behavior: Leisure time activities:	Absent	Present
Solitude:	Absent	Present
Cheshta vibhrama		
General psycho motor activity: (Tick the relevant finding) Speech: Facial expression: Posture: Tics:	Absent	Present
Achara vibhrama		
Personal Standard: Habit of cleanliness: Neglect of daily routine and work: Obsessions in work: **Social Standard:** Nudity: Religious beliefs:		

Any other:		

Prayogashaleeya pareekshana (Laboratory investigations):

Vikriti pareeksha:

Nidana:

Poorvaroopa:

Roopa:

Upashaya/anupashaya:

Samprapti:

Samprapti ghataka:

- **Dosha (Kayika/Manasika)**
- **Dooshya**
- **Agni**
- **Ama**
- **Srotas**
- **Dushti prakara**
- **Udhbavasthana**
- **Sancharasthana**
- **Adhishthana**
- **Vyaktasthana**
- **Rogamarga**

Vyadhi avastha:

Vyavachchedaka nidana (Differential diagnosis)

Vyadhi nama (Diagnosis):

Upadrava:

Arishta lakshana:

Sadhya-Asadhyata:

CHIKITSA

Chikitsa Sootra:

Yuktivyapashraya (Methods and duration):

Shodhana:
Vamana/ Virechana/ Basti/ Nasya/ Raktamokshana

Shamana procedures:

Rasayana procedures:

Bahya chikitsa:

Chikitsa	Aushadha	Kala

Abhyantara chikitsa:

Kalpa	Matra	Anupana	Kala

Daivavyapashraya (Methods and duration):

Mantra (Hymns/ Prayer)	
Aushadha (Medicine)	
Mani (Wearing of precious gems)	
Mangala (Auspicious ceremony)	
Bali (Sacrifice/ Offering to God)	
Upahara (Gift)	
Homa (Oblations)	
Niyamana (Observance of scriptural rules)	
Prayashchita (Atonement)	
Upavasa (Fasting)	
Svastyayana **(Chanting of auspicious hymns)**	
Pranipata (Observance of the god)	
Gamana (Going on pilgrimage)	

Satvavajaya (Methods and duration)

Aashvasana (Assurance)	
Pratidvandva chikitsa (Replacement of emotions)	
Chintya (Regulation of thought process)	
Vicharya (Retraining of ideas)	
Oohya (Channeling of presumptions)	
Dhyeya (Correction of objectives and ideas)	
Sankalpa (Proper guidance and advice for taking right decisions)	
Dhriti (Proper control/patience)	
Manokshobha chikitsa (Fear therapy or Psycho-shock therapy)	

Pathya/Apathya:

Pathya ahara:

Pathya vihara:

Apathya ahara:

Apathya vihara:

Dainika Patraka

Dinanka	Vishesha avastha/ Navina Lakshana utpatti	Upayukta aushadha yoga	Parinama

Dainandika akalana (Daily assessment):

Karya	Dainandika Nireekshana (Daily observation) Prapti/Alpa-prapti/Aprapti									
	1	2	3	4	5	6	7	8	9	10
Ruk Upashamanam (Reduction of Pain)										
Annabhilasha (Desire for the intake of food)										
Bhuktasya paripaka (Proper and easy digestion of the ingested food)										
Srishta vit (Proper evacuation of faeces)										
Srishta mootra (Proper evacuation of urine)										
Srishta vata (Proper evacuation of flatus)										
Sharira laghava (Lightness in the body)										
Prasannendriya (Optimum functioning of sense organs)										
Sukha swapna (Proper timely sleep)										
Vaikarikanam cha swapnam adarshanam (Devoid of unpleasant dreams)										
Sukha prabodhanam (Proper timely awakening)										
Bala labha (Gain of strength)										
Varna labha (Improved complexion)										
Swara yoga (Pleasant voice)										
Ayusho labha (Improved quality of life)										
Soumanasyam (Pleasant mind)										
Samagni (Normal digestive fire)										

Karyaphala:

Manobuddhindriyasharira tushti	
Vikara upashamana	
Muchyamana	
Pragunibhava	
Anya	

VIDYARTHI HASTAKSHARA **ADHYAPAKA HASTAKSHARA**

Rasayana-Vajikarana Rugna Patraka (Rasayana-Vajikarana Case Paper)

<table>
<tr><td>Kramanka (Case No):</td><td colspan="2">Bahirkramanka (OPD No):</td><td>Antarkramanka (IPD No):
Shayya Kramanka (Bed No):</td></tr>
<tr><td colspan="2">Rugna Nama (Name of the Patient):</td><td>Vaya (Age):</td><td>Linga (Gender): M/F/T</td></tr>
<tr><td>Religion: H/M/S/C/J/O</td><td colspan="3"></td></tr>
<tr><td>Vaivahika sthiti
(Marital Status):</td><td colspan="3">Unmarried/Married/Divorced/Widowhood</td></tr>
<tr><td rowspan="2">Vyavasaya
(Occupation):</td><td colspan="2">Poorva (past):</td><td>Sadhya (present):</td></tr>
<tr><td colspan="2">Avadhi (working hours):</td><td>Vritti swabhava (Nature of work):</td></tr>
<tr><td>Shikshana (Education):</td><td colspan="3">Uneducated/Lower Primary/SSC/PUC/UG/PG</td></tr>
<tr><td>Samajika arthika sthiti
(Socio-economic Status):</td><td colspan="3">Lower/Middle/Upper</td></tr>
<tr><td colspan="3">Sthana (Address):</td><td>Contact No.</td></tr>
<tr><td colspan="2">Pravesha dinanka (Date of admission):</td><td colspan="2">Nirgamana dinanka (Date of discharge):</td></tr>
<tr><td colspan="4">Parinama (Result):</td></tr>
</table>

Pradhana vedana (Chief Complaint): **Kala Prakarsha (Duration):**

Anubandhi vedana (Associated Complaint):

Adyatana-vyadhi vrittanta (H/o Present illness):

Saha-vyadhi vrittanta(Comorbidity):

Poorva-vyadhi vrittanta (H/o Past illness):

Kautumbika vrittanta (Family history):

	Alive	Dead	Disease	Healthy	Age
Father					
Mother					
Spouse					
Brother					
Sister					
Son					
Daughter					

H/o Tulya gotra vivaha (Consanguinity of marriage): Yes……. /No…….

H/o Kulaja vikara vrittanta (Hereditary diseases): Yes……. /No……

Vaiyaktika vrittanta (Personal history):

Ahara prakara (Dietary habits)-Veg/Nonveg/Mixed

Jala pana (water intake)-Hina/Mithya/Ati

Kshudha (Appetite)-Good/Impaired

Ahara sevana-Alpa/Ati/Adhyashana

Mala pravritti (Bowel movement)-

Koshtha: Mridu/Madhyama/Krura

Mutra pravritti (Micturition)-

Nidra (Sleep)-Sound/Disturbed, H/o Diva swapna / Ratri jagarana

Vyasana (Habits / Addiction)-Tea/Coffee/Atilavana/Atikshara/Atikatu/Smoking/Tobacco chewing/Alcohol/Drugs/None

Smoking-Regular/Occasional/Never Smoked/Ex-smoker

Quantity……/day Duration of smoking……

Alcohol intake - No/Social drinker/Habitual

Quantity……/day Duration of alcohol intake ……

Anurjata (Drug sensitivity)-

Chintadhikya (Mental stress) -

Rajopravritti vrittanta (Menstrual history)-

Rogi pareeksha:

a) Samanya Pareeksha:

Sharira akriti (Body Built): Sanjna (Consciousness): Gati (Gait):

Sharira dairghya (Height): cm Sharira bhara (Weight): Kg Panduta (Pallor):

Netra pitavarnata (Icterus): Nila-shyava varnata (Cyanosis): Clubbing:

Granthi (Lymphadenopathy): Shopha (Oedema): Jihva liptata (Tongue coating):

Nakha (Nails): Anya (Other findings):

Vitals:

Temperature: ºF Heart rate: /min Pulse rate: /min

Blood pressure: mmHg Respiratory rate: /min

b) Samsthanika pareeksha/Vishishta pareeksha (Systemic Examination):

c) Srotas pareeksha:

Srotas	Moolasthana	Darshanagamya vishaya	Sparshanagamya vishaya	Prashnagamya vishaya

d) Ashta-sthana pareeksha:

Nadi:	Shabda:
Mootra:	Sparsha:
Mala:	Drik:
Jihva:	Akriti:

e) Dashavidha pareeksha:

1. Prakriti									
	Shareerika Prakriti		V	P	K	VP	VK	PK	S
	Manasika Prakriti		Sattva		Rajas		Tamas		
2. Vikriti	Dosha	Shhareerika	V		P		K		
		Manasika	Satvika		Rajasika		Tamasika		
	Dooshya		Rasa	Rakta	Mamasa	Medas	Asthi	Majja	Shukra
	Mala	Pureesha	Frequency			Consistency			
		Mootra	Frequency			Consistency			
		Sweda	Normal			Abnormal			
3. Sara	T	R	M	M	A	M	S	S	
4. Samhanana	Heena		Madhyama			Uttama			
5. Pramana	Heena		Madhyama			Uttama			
6. Satmya	Heena		Madhyama			Uttama			
7. Ahara Shakti	Abyawarana Shakti		Avara		Madhyama		Pravara		
	Jarana Shakti		Avara		Madhyama		Pravara		
8. Vyayama Shakti	Heena		Madhyama			Uttama			
9. Vaya	Bala		Madhyama			Vriddha			
10. Sattva	Heena		Madhyama			Uttama			

f) Prayogashaleeya pareekshana (Investigations):

Roga Pareeksha:

Nidana:

Poorvaroopa:

Roopa:

Upashaya/Anupashaya:

Samprapti:

Dosha:

Dooshya: Dhatu/Upadhatu/Mala

Ojas: Anuloma/ Pratiloma kshaya

Srotas:

Srotodushti prakara:

Udbhava sthana:

Sanchara sthana:

Vyakta sthana:

Adhisthana:

Rogamarga:

Vyadhi avastha vishesha (Stage of the disease):

Sama/Nirama Nava/Purana Uttana/Gambhira	Kevala dosha/ Samsrushta/Sannipata dosha	Avritta dosha

Vyavachedaka nidana (Differential diagnosis):

Vyadhi nama (Diagnosis):

Upadrava:

Arishta lakshana:

Sadhya-Asadhyata:

CHIKITSA

Shodhana

Vamana/Virechana/ Basti/ Nasya/Raktamokshana

Bahya Chikitsa:

Chikitsa	Aushadha	Kala

Abhyantara Chikitsa:

Kalpa	Matra	Kala	Anupana

Rasayana / Vajikarana

Kalpa	Matra	Kala	Anupana	Avadhi

2. Daivavyapashraya Chikitsa:

3. Satvavajaya Chikitsa:

Pathya/Apathya:

Pathya: Ahara:

Vihara:

Apathya: Ahara:

Vihara:

Dainandika akalana (Daily Assessment):

Karya	Dainandika Nireekshana (Daily observation) Prapti/Alpa-prapti/Aprapti									
	1	2	3	4	5	6	7	8	9	10
Ruk Upashamanam (Reduction of Pain)										
Annabhilasha (Desire for the intake of food)										
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Srishta vit (Proper evacuation of faeces)										
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Shareera laghava (Lightness in the body)										
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Sukha prabodhanam (Proper timely awakening)										
Bala labha (Gain of strength)										
Varna labha (Improved complexion)										
Swara yoga (Pleasant voice)										
Ayusho labha (Improved quality of life)										

Soumanasyam (Pleasant mind)										
Samagni (Normal digestive fire)										

Karyaphala:

Manobuddhindriyasharira tushti	
Vikara upashamana	
Muchyamana	
Pragunibhava	
Anya	

Vidyarthi Hastakshara **Adhyapaka Hastakshara**

Kayachikitsa Samkshipta Rugna Patraka (Short Case Paper)

Kramanka (Case No):	Bahirkramanka (OPD No):		Antarkramanka (IPD No): Shayya Kramanka (Bed No):
Rugna Nama (Name of the Patient):		Vaya (Age):	Linga (Gender): M/F/T
Religion: H/M/S/C/J/O			
Vaivahika sthiti (Marital Status):	Unmarried/Married/Divorced/Widowhood		
Vyavasaya (Occupation):	Poorva (past):		Sadhya (present):
	Avadhi (working hours):		Vritti swabhava (Nature of work):
Shikshana (Education):	Uneducated/Lower Primary/SSC/PUC/UG/PG		
Samajika arthika sthiti (Socio-economic Status):	Lower/Middle/Upper		
Sthana (Address):			Contact No.
Parinama (Result):			

Pradhana Vedana (Chief complaint): **Kala Prakarsha (Duration):**

Anubandhi Vedana (Associated complaint):

VaiyaktikaVrittanta (Personal history):

Kshudha (Appetite): Agni: Sattva:

Nidra (Sleep): Koshtha (Bowel): Vyasana (Habits/Addiction):

Rogi Pariksha:

A) Samanya Pareeksha (General examination):

Sharira Dairghya (Height): cm Sharira Bhaara (Weight): Kg

Nadi (Pulse): /min Raktachapa (Blood pressure): mmHg

Shwasana Gati (Resp.rate): /min Hridgati (Heart rate): /min

Gati (Gait): Anya (Any other):

B) Ashta Sthana Pareeksha:

Nadi:	Shabda:
Mootra:	Sparsha:
Mala:	Drik:
Jihva:	Akriti:

C) Vikrita srotas pareeksha (Brief Examination of the involved system):

Roga Pareeksha:

Nidana:

Poorvaroopa:

Roopa:

Upashaya/Anupashaya:

Samprapti:

Dosha:

Dooshya: Dhatu/Upadhatu/Mala

Srotas:

Vyadhi avastha vishesha (Stage of the disease):

Sama/Nirama Nava/Purana Uttana/Gambheera	Kevala Dosha/ Samsrushta/Sannipata Dosha	Avritta Dosha

Vyadhi Nama (Diagnosis):

Chikitsa:

Abhyantara				**Bahya**		
Aushadha yoga	Matra	Anupana	Sevana kala	Upakrama	Kala	Avadhi

Pathya ahara/Vihara

Pathya ahara	Pathya vihara – Shareerika /Manasika

Apathya ahara/Vihara

Apathya ahara	Apathya vihara-Shareerika/Manasika

Vidyarthi Hastakshara **Adhyapaka Hastakshara**

COURSE CURRICULUM FOR THIRD PROFESSIONAL BAMS
(PRESCRIBED BY NCISM)



Panchakarma & Upakarma
(Therapeutic Procedural Management)

(SUBJECT CODE : AyUG-PK)

(Applicable from 2021-22 batch, from the academic year 2024-25 onwards for 5 batches or until further notification by NCISM, whichever is earlier)

ncism

।। आयुषे सर्वलोकानाम् ।।

BOARD OF AYURVEDA
NATIONAL COMMISSION FOR INDIAN SYSTEM OF MEDICINE
NEW DELHI-110026

NCISM

III Professional Ayurvedacharya
(BAMS)
Subject Code : AyUG-PK

Panchakarma & Upakarma
(Therapeutic Procedural Management)

Summary

Total number of Teaching hours: 300			
Lecture (LH) - Theory		**100**	**100(LH)**
Paper I	100		
Non-Lecture (NLHT)		**60**	**200(NLH)**
Paper I	60		
Non-Lecture (NLHP)		**140**	
Paper I	140		

Examination (Papers & Mark Distribution)					
Item	**Theory Component Marks**	**Practical Component Marks**			
		Practical	**Viva**	**Elective**	**IA**
Paper I	100	100	70	-	30
Sub-Total	100	200			
Total marks	300				

Important Note :- The User Manual III BAMS is a valuable resource that provides comprehensive details about the curriculum file. It will help you understand and implement the curriculum. Please read the User Manual III before reading this curriculum file. The curriculum file has been thoroughly reviewed and verified for accuracy. However, if you find any discrepancies, please note that the contents related to the MSE should be considered authentic. In case of difficulty and questions regarding curriculum write to **syllabus24ayu@ncismindia.org**

PREFACE

Panchakarma, a cornerstone of Ayurveda, embodies holistic healing through detoxification, rejuvenation, and restoration of balance in body and mind. This syllabus is designed to provide students with a profound understanding of its principles, therapeutic applications, and integration into modern healthcare.

Structured into ten sections, the curriculum covers foundational and advanced concepts, emphasizing detoxification, rejuvenation, and the clinical implementation of various Panchakarma procedures. Special attention is given to Keraleeya Kriyakrama therapies such as Takradhara, Thalapothichil, Annalepa, and Pizhichil, broadening students' knowledge of region-specific treatments. Additionally, the syllabus explores the selection and application of formulations used in Snehana, Vamana, Virechana, Basti, and Nasya, ensuring students can provide personalized and effective care based on Prakriti, Vikriti, and individual health conditions.

To enhance practical skills, the syllabus incorporates hands-on training, case studies, mannequin-based simulations, and interactive learning methods. These approaches foster competency, teamwork, and communication skills—essential qualities for effective clinical practice. The curriculum also integrates contemporary research and modern technological advancements in Panchakarma, ensuring relevance in today's healthcare landscape. Additionally, the inclusion of physiotherapy principles enhances students' ability to combine Panchakarma with other therapeutic modalities.

This revised syllabus represents a significant advancement, removing outdated content while incorporating contemporary insights. Beyond technical proficiency, it fosters essential qualities such as empathy, patient-centered care, and professional communication. Through this comprehensive and innovative approach, students will emerge as skilled practitioners, capable of promoting and integrating Ayurveda within modern medical practice, contributing to its global acceptance and continued relevance.

Furthermore, the curriculum aims to inspire critical thinking and research-oriented learning, encouraging students to explore evidence-based applications of Panchakarma. By integrating traditional knowledge with scientific advancements, the syllabus prepares students to to make meaningful contributions to the continued relevance and efficacy of Panchakarma in contemporary medical practice.

INDEX

Course Code and Name of Course 5
Table 1 : Course learning outcomes and mapped PO 5
Table 2 : Contents of Course 6
Paper 1 6
Table 3 : Learning objectives of Course 9
Paper 1 9
Table 4 : NLHT Activity 65
Table 5 : List of Practicals 68
Table 6 : Assessment Summary: Assessment is subdivided in A to H points 72
6 A : Number of Papers and Marks Distribution 72
6 B : Scheme of Assessment (Formative and Summative) 72
6 C : Calculation Method for Internal assessment Marks 72
6 D : Evaluation Methods for Periodical Assessment 73
6 E : Question Paper Pattern 74
6 F : Distribution of theory examination 75
Paper 1 75
6 G : Instructions for UG Paper Setting & Blue print 76
6 H : Distribution of Practical Exam 77
References Books/ Resources 78
Syllabus Committee 80
Abbreviations 85

Course Code and Name of Course

Course code	Name of Course
AyUG-PK	Panchakarma & Upakarma

Table 1 : Course learning outcomes and mapped PO

SR1 CO No	A1 Course learning Outcomes (CO) AyUG-PK At the end of the course AyUG-PK, the students should be able to-	B1 Course learning Outcomes mapped with program learning outcomes.
CO1	Describe the fundamental concepts of Panchakarma	PO1
CO2	Identify and describe drugs, dose, instruments and their method of application in Panchakarma procedures	PO3
CO3	Analyze the clinical applications of each procedure based on fundamental principles	PO2
CO4	Illustrate comprehensive knowledge of Panchakarma procedures with appropriate and sequential Purva Karma, Pradhana Karma and Paschat Karma	PO2
CO5	Demonstrate skills in performing procedures in various situations	PO4,PO5
CO6	Assess the therapeutic efficiency and manage complications	PO2,PO7
CO7	Utilize technological advancements and allied therapeutic interventions	PO2,PO7
CO8	Possess qualities of a good Communicator and ethical Clinician & Researcher	PO6,PO7,PO8,PO9

Table 2 : Contents of Course

Paper 1 (Panchakarma and Upakarma)						
Sr. No	**A2 List of Topics**	**B2 Term**	**C2 Marks**	**D2 Lecture hours**	**E2 Non-Lecture hours Theory**	**E2 Non-Lecture hours Practical**
1	**Fundamentals of Panchakarma** 1. Introduction to Panchakarma 2. Panchakarma in Swastha and Atura 3. Indications and contraindications of Shodhana 4. Agni and Koshta Pariksha in Panchakarma 5. Principles in Shodhana 6. Requirements of Panchakarma theatre	1	8	6	2	4
2	**Snehana Karma** 1. Introduction 2. Sneha Dravya 3. Lipids 4. Rookshana 5. Abhyantara Snehana 6. Bahya Snehana	1	12	16	12	28
3	**Swedana Karma** 1. Introduction 2. Swedana Dravya 3. Indications and Contraindications of Swedana 4. Sagni Sweda 5. Niragni Sweda 6. Procedure of Saagni Swedana Karma 7. Principles of practice of Swedana Karma in Sandhigata Vata, Vatarakta, Pakshaghata, Ardita, Gridhrasi, Amavata 8. Swedana Karmukata	1	12	9	4	10
4	**Special Procedures: Sankara Sweda, Ksheeradhooma, Pizhichil, Dhanyamladhara, Takradhara, Thalam and Thalapothichil and Annalepa** Definition, Types, Procedure and Benefits of: 1. Sankara Sweda	2	10	7	9	19

	2. Ksheeradhooma 3. Pizhichil 4. Dhanyamladhara 5. Takradhara 6. Thalam and Thalapothichil 7. Annalepa					
5	**Physiotherapy** 1. Introduction 2. Static exercise 3. Isotonic Exercise 4. Deep Heating Modalities 5. Superficial Heating Modalities 6. Electro Therapy 7. Manual Therapy	2	5	6	1	7
6	**Vamana Karma** 1. Introduction 2. Indications and Contraindications of Vamana Karma 3. Purva Karma of Vamana 4. Pradhana Karma of Vamana 5. Paschat Karma of Vamana 6. Sadyo Vamana 7. Vamana Karmukata 8. Principles of practice of Vamana Karma in Shwasa, Amlapitta, Kushta and Yuvanapidaka	2	10	13	7	15
7	**Virechana Karma** 1. Introduction 2. Classification of Virechana 3. Principles of selection of Virechana formulations 4. Indications and Containdications of Virechana Karma 5. Purva Karma of Virechana 6. Pradhana Karma of Virechana 7. Paschat Karma of Virechana 8. Virechana Karmukata 9. Principles of practice of Virechana Karma in Kushta, Vatarakta, Pakshaghata and Prameha	2	10	13	7	15
8	**Basti Karma** 1. Introduction 2. Basti Yantra and Matra	3	18	18	10	25

	3. Anuvasana and Anuvasanopaga, Asthapana and Asthapanopaga Dravya 4. Indications and Contra indications of Anuvasana Basti 5. Purva Karma of Anuvasana Basti 6. Pradhana Karma of Anuvasana Basti 7. Paschat Karma of Anuvasana Basti 8. Indications and Contra indications of Niruha Basti 9. Purva Karma of Niruha Basti 10. Preparation of Basti Dravya 11. Pradhana Karma of Niruha Basti 12. Paschat Karma of Niruha Basti 13. Niruha Basti Karmukata 14. Anuvasana Basti Karmukata 15. Basti Formulations 16. Principles of practice of Basti a) Niruha in Gridhrasi and Amavata b) Anuvasana in Kateegraha					
9	**Nasya Karma** 1. Introduction 2. Shirovirechana Gana 3. Purva Karma of Nasya 4. Pradhana Karma of Nasya 5. Paschat Karma of Nasya 6. Nasya formulations 7. Nasya Karmukata 8. Principles of practice of Nasya in Pakshaghata, Apabahuka, Manyastambha and Ardita	3	10	10	6	12
10	**Emergency management and Research updates in Panchakarma and Upakarma** 1. Emergency management 2. Research updates in Snehana, Swedana, Vamana, Virechana, Basti, Nasya and Upakarma	3	5	2	2	5
Total Marks			**100**	**100**	**60**	**140**

Table 3 : Learning objectives of Course

Paper 1 (Panchakarma and Upakarma)										
A3 Course out come	**B3 Learning Objective (At the end of the session, the students should be able to)**	**C3 Domain/sub**	**D3 MK / DK / NK**	**E3 Level**	**F3 T-L method**	**G3 Assessment**	**H3 Assessment Type**	**I3 Term**	**K3 Integration**	**L3 Type**
Topic 1 Fundamentals of Panchakarma (LH :6 NLHT: 2 NLHP: 4)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO1	Define Panchakarma, Panchashodhana and describe the importance of Shodhana and its benefits .	CK	MK	K	L&PPT ,CBL	S-LAQ	F&S	I	-	LH
CO1, CO3	Enlist the types of Raktamokshana and explain its utility in diseases like Kushta, Vatarakta, Siragranthi and Gridhrasi .	CC	NK	KH	CBL,L_VC	CBA,QZ	F	I	-	NLHT1.1
CO1, CO3	Explain the concept of Panchakarma in Swastha and Atura.	CC	MK	KH	L_VC,PER	S-LAQ	F&S	I	-	LH
CO1, CO3	Explain Rutu Shodhana.	CC	MK	KH	TPW	M-POS,PRN	F&S	I	-	NLHT1.2
CO1, CO3	Explain the general indications and contraindications of Shodhana Karma	CC	MK	KH	CBL,DIS,L&PPT	CBA,S-LAQ	F&S	I	-	LH
CO1	Explain Agni and Koshta Pariksha in Panchakarma	CC	MK	KH	REC,L&PPT ,PrBL	CL-PR,S-LAQ,SBA	F&S	I	-	LH
CO1, CO3	Apply the assessment of Koshta and Agni Pariksha in Panchakarma clinically	CAP	MK	KH	CBL,BS	PP-Practical,CBA,T-OBT	F&S	I	-	NLHP1.1

CO1, CO3	Explain Doshagati and Upasthitha Dosha in Panchakarma	CC	MK	K	BL,L&PPT	S-LAQ	F&S	I	-	LH
CO1	Describe Prakruthi Praptha Purusha Lakshana and Ashtamahadoshakarabhava.	CK	DK	K	L&PPT,REC	M-POS,VV-Viva	F	I	-	LH
CO1	Reproduce the requirements of Panchakarma theatre.	PSY-GUD	DK	D	RP,L_VC,RLE,SIM,FV	CHK,M-CHT	F&S	I	-	NLHP1.2
CO1, CO7	Demonstrate recent developments in instrumentation in practice of Panchakarma and Upakarma	CAP	DK	KH	L_VC,D,FV	P-ID,M-POS,P-MOD	F	I	-	NLHP1.3

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 1.1	Utility of Raktamokshana in diseases	Group Discussion Students are divided into groups, each assigned a condition (Kushta, Vatarakta, Siragranthi, or Gridhrasi) with detailed case scenarios. Groups discuss symptoms, diagnostic criteria, Raktamoksha modalities, management challenges, and propose solutions. After 20-30 minutes, each group presents their findings, followed by a class discussion. The session concludes by emphasizing the importance of Raktamokshana, with assessments based on engagement and solution quality.
NLHT 1.2	Project work on Rutu Shodhana	Team Project Work Divide the students into six teams, assigning each team a specific season (Vasanta, Grishma, Varsha, Sharad, Hemanta, and Shishira). Instruct them to create a comprehensive plan for Rutu Shodhana tailored to their assigned season. Each project should include a title, clear objectives, detailed methodology, a timeline for implementation, necessary resources, and a risk management strategy to address potential challenges. Encourage creativity and thoroughness in their presentations to foster a deeper understanding of seasonal Ayurvedic practices.

Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 1.1	Koshta and Agni Pariksha in Panchakarma	Case Based Learning Introduce a case that necessitates Agni / Koshta Pariksha , focusing on patient presenting with symptoms of digestive discomfort, like bloating, irregular bowel movements, and fatigue. Provide details about their diet, lifestyle, and medical history. Participants analyze the case in small groups, assessing Agni and Koshta imbalances. Each group presents findings, followed by an instructor-led discussion. The session concludes with key takeaways on the clinical importance of Agni/Koshta Pariksha in Ayurveda.
NLHP 1.2	Panchakarma theatre requirements	Simulation Students simulate a Panchakarma theatre setup, identifying infrastructure needs, organizing equipment, and ensuring sterilization. They role-play as therapists and patients, practicing positioning, draping, and procedures while maintaining hygiene. Emergency scenarios are simulated to enhance crisis management skills. Through hands-on participation, students internalize spatial arrangements, workflow, and safety protocols for practical learning.
NLHP 1.3	Advancement in instrumentation in Panchakarma and Upakarma	Field visit The instructor guides students through a Panchakarma theatre or video demonstrations, explaining equipment and recent advancements. Students engage through observation, questions, and discussions on challenges. They summarize key points, enhancing their practical understanding of Panchakarma procedures and instrumentation.

Topic 2 Snehana Karma (LH :16 NLHT: 12 NLHP: 28)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1	Define Sneha and Snehana and describe the classification of	CK	MK	K	ML,L&	S-LAQ	F&S	I	-	LH

	Snehana Karma				PPT					
CO1	Explain the importance of Snehana Karma	CC	MK	KH	DIS,BS	T-OBT,PRN	F&S	I	-	NLHT2.1
CO1	Describe Guna of Sneha Dravya.	CK	MK	K	EDU,BL,L&PPT	T-OBT,M-CHT,QZ	F&S	I	-	LH
CO2	Describe the Indications of Ghrita.	CK	MK	K	TUT,REC,L&PPT	WP	F&S	I	V-RS,V-RS	LH
CO2	Describe the Indications of Taila.	CK	MK	K	L&PPT,PrBL,DA	T-OBT,QZ	F&S	I	V-RS,V-RS	LH
CO2	Demonstrate principles of selection of Sneha in Bahya Snehana according to Dosha, Satmya, Avastha and Vyadhi.	CAP	MK	KH	CBL,TUT	SBA,CBA	F&S	I	V-RS,V-RS	NLHT2.2
CO2	Demonstrate principles of selection of Sneha in Abhyantara Snehana according to Dosha, Satmya, Vyadhi and Avastha.	CAP	MK	KH	RP,CBL	CL-PR,P-EXAM	F&S	I	-	NLHT2.3
CO7	Describe classification of Lipids, Digestion, Absorption and Metabolism of Fat	CK	MK	K	L_VC,PER,L&GD,CBL	PRN,O-QZ	F	I	V-KS	LH
CO7	Comprehend metabolism of fat in the context of Abhyantara Snehana	CC	DK	KH	L&GD,TPW	CL-PR,QZ,SBA,CR-W	F	I	-	NLHT2.4
CO7	Distinguish Pharmacodynamics of Snehana through Oral, Rectal and Topical methods	CC	DK	KH	L&GD,CBL,BS	CL-PR,M-CHT,M-POS	F	I	-	NLHT2.5

CO1, CO2	Describe the importance and method of Deepana, Pachana and Rookshana in Snehana	CK	MK	K	PER,RLE,L&PPT	COM,CL-PR	F&S	I	-	LH
CO1, CO2	Describe the Guna of Rookshana dravya- Ushnodaka,Dhanyamla, Takra and Samyak Rookshana Lakshana	CK	MK	K	L&PPT ,TPW,L &GD	QZ ,PRN	F&S	I	V-DG	LH
CO3, CO4	Explain Udwartana, types and its benefits .	CC	MK	KH	FC	PP-Practical,DOAP,P-REC,CL-PR	F&S	I	-	NLHT2.6
CO3, CO4, CO5	Demonstrate the procedure of Udwartana	PSY-GUD	MK	SH	KL,PT, D-M,D	P-PRF,DOPS	F&S	I	-	NLHP2.1
CO3, CO4, CO5	Demonstrate the procedure of Udgharshana and Utsadana.	PSY-GUD	MK	SH	CBL,D-M	DOPS	F&S	I	-	NLHP2.2
CO3, CO4	Describe Indications and contra indications of Abhyantara Snehana	CK	MK	K	L,L&PPT ,PER	CL-PR,P-REC	F&S	I	-	LH
CO3, CO4	Explain Shodhanartha Snehapana, time of administration, Matra, Kala and Anupana.	CC	MK	KH	L&PPT ,L	S-LAQ,P-REC	F&S	I	-	LH
CO3, CO4	Explain Shamanartha Snehapana, Kala, Matra and Anupana.	CC	MK	KH	L&PPT	S-LAQ,PRN	F&S	I	-	LH
CO3, CO4	Comprehend Brumhana Sneha Kala, Matra and Anupana.	CC	MK	KH	L&PPT	S-LAQ	F&S	I	-	LH
CO3, CO4	Explain the Diet and Parihara Vishaya during Snehapana.	CC	MK	KH	L&GD, BL,TP	CL-PR	F&S	I	-	NLHT2.7

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CO3, CO4	Distinguish Accha Sneha and Pravicharana Sneha.	CC	MK	KH	PER,BL ,L&GD	CBA,PRN, P-PRF	F&S	I	-	NLHT2.8
CO3, CO4	Demonstrate the procedure of Shodhanartha Snehapana.	CAP	MK	KH	CBL,D-BED	CBA,SP	F&S	I	-	NLHP2.3
CO3, CO4	Demonstrate Shodhanartha Snehapana in Kushta and Vatarakta	CAP	MK	KH	CBL,RP ,DIS	CBA	F&S	I	-	NLHP2.4
CO3, CO4	Demonstrate the procedure of Shamanartha Snehapana.	CAP	MK	SH	DIS,CBL	PM,CBA	F&S	I	-	NLHP2.5
CO3, CO4	Outline Shamanartha Snehapana in Kushta and Vatarakta	CAN	MK	KH	DIS,CBL,PBL	CBA,SBA	F&S	I	-	NLHP2.6
CO3, CO4	Identify Sneha Vyapat and discuss the Chikitsa	CAP	MK	KH	SY,PBL ,CBL	CBA,P-CASE	F&S	I	-	NLHP2.7
CO3, CO4	Distinguish Brumhana Snehapana and Sadyasnehana.	CAP	MK	KH	PBL,CBL	SBA	F&S	I	-	NLHP2.8
CO3, CO4	Describe definition, indications, contra indications and the benefits of Abhyanga.	CK	MK	KH	FC,L&PPT ,PL	CL-PR,P-REC	F&S	I	-	LH
CO3, CO4	Explain types of Massage and various Massage Techniques.	CC	MK	KH	L&PPT ,L_VC,IBL	COM,QZ	F&S	I	-	LH
CO3, CO4	Comprehend the concept of Murdha Taila and specific Indications.	CC	MK	KH	BS,L_VC,PER	M-POS,CL-PR,S-LAQ	F&S	I	-	LH
CO3, CO4	Interpret Shiropichu and Shirobasti.	CC	MK	KH	TBL,L&PPT ,DIS	S-LAQ,PRN	F&S	I	-	LH

CO3, CO4, CO5	Compare Abhyanga in Swastha and Atura.	CAN	MK	SH	BS,DIS	CL-PR	F&S	I	-	NLHT2.9
CO3, CO4, CO5	Demonstrate different Massaging Techniques	PSY-GUD	MK	SH	D-M,L_VC,D	P-RP,DOPS	F	I	-	NLHT2.10
CO2, CO3, CO5	Identify the clinical application of Murdhni Taila in Vatavyadhi .	CAN	DK	KH	CBL,BS,PBL	T-OBT,CL-PR	F&S	I	-	NLHT2.11
CO3, CO4, CO5	Demonstrate the procedure of Shiro Abhyanga	PSY-GUD	MK	SH	D-M	OSPE,DOPS	F&S	I	-	NLHP2.9
CO3, CO4, CO5	Demonstrate the procedure of Shirodhara with Taila	PSY-GUD	MK	SH	D-M	OSPE,P-PRF,DOPS	F&S	I	-	NLHP2.10
CO3, CO4	Demonstrate the procedure of Shiropichu .	PSY-GUD	MK	SH	D,D-M	DOPS	F&S	I	-	NLHP2.11
CO3, CO4	Demonstrate the procedure of Shirobasti.	PSY-GUD	MK	SH	D-M	DOPS,P-PRF	F&S	I	-	NLHP2.12
CO3, CO4	Demonstrate Kati Basti , Greeva Basti and Janu Basti.	PSY-GUD	MK	SH	D-M	DOPS,P-PRF,OSPE	F&S	I	-	NLHP2.13
CO3, CO4	Demonstrate Abhyanga .	PSY-GUD	MK	SH	D-M	OSPE,DOPS,P-PRF	F&S	I	-	NLHP2.14

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity

NLHT 2.1	Importance of Snehana Karma	Brainstorming Students are divided into groups to explore the utility of different types of Snehana in Ayurveda, with a particular focus on the roles of both Bahya Snehana and Abhyantara Snehana. Each group discusses the contribution of Snehana to the effectiveness of Panchakarma therapies, emphasizing how proper oleation enhances detoxification, improves circulation, and prepares the body for subsequent procedures. By brainstorming these key aspects, students deepen their understanding of how Snehana plays a critical role in achieving optimal therapeutic outcomes during Panchakarma treatments, ensuring a holistic approach to healing and rejuvenation.
NLHT 2.2	Selection of Bahya Sneha	Case Based Learning In this activity, students are divided into groups and presented with 3-4 patient scenarios, such as a Vata-dominant disorder, a Pitta-related skin condition, and Kapha-related obesity. Each scenario includes details on the patient's prakriti, vikriti, and clinical symptoms. Groups discuss and select an appropriate Taila for each case, justifying their choices based on the involved dosha, the disease nature, and the properties of the selected Taila. This approach aims to deepen understanding of Bahya Sneha and its applications in Ayurveda. Focus discussion on Dhanvantara Taila, Sahacharadi Taila, Pinda Taila, Ksheerabala Taila, Kottamchukkadi Taila,Mahanarayana Taila & Murivenna
NLHT 2.3	Selection of Abhyantara Sneha	CBL / Role play In this activity, students analyze 3-4 patient scenarios: a Vata-predominant patient with arthritis, a Pitta-predominant patient with acidity, and a Kapha-predominant patient with obesity. They determine the appropriate type of Sneha (e.g., Ghrita or Taila), dose, Anupana, and administration schedule for each case. A role play follows, where one student acts as the physician explaining Snehapana, another as the patient asking questions, and observers evaluate communication and content accuracy. The discussion also focuses on specific types of Ghrita and Taila, such as Dadimadi Ghrita, Indukanta Ghrita, Kalyanaka Ghrita, Guggulutiktaka Ghrita, Moorchita Tila Taila, and Moorchita Ghrita, to deepen understanding of Abhyantara Snehana in Ayurvedic practice.

NLHT 2.4	Fat metabolism	Group Discussion In this group discussion, participants explore changes in fat metabolism under conditions like fasting, exercise, hyperlipidemia, a ketogenic diet, and Chatussneha practices. Afterward, groups present their findings, with feedback and additional insights from the facilitator. Students also engage in a concept mapping activity, linking key aspects of fat metabolism, including digestion, transport mechanisms, storage, utilization, and hormonal regulation. This approach enhances understanding of the complex processes in fat metabolism.
NLHT 2.5	Snehana Pharmacodynamics	PBL In this activity, groups analyze clinical scenarios involving different applications of Snehana in Ayurveda. One group examines a patient with chronic constipation prescribed Sneha Basti, focusing on absorption and systemic effects. Another group discusses oral Snehapana for a patient with osteoarthritis, exploring how medicated ghee promotes joint lubrication. The third group evaluates a patient with dry skin conditions treated with topical Snehana, assessing local effects. Each group presents their findings, enhancing understanding therapeutic roles of Snehana in various conditions.
NLHT 2.6	Udwartana and its benefits.	Flipped Class room Students review learning materials on Udwartana, including textbook chapters, videos, and infographics before class. Guided questions prompt exploration of its types, benefits, indications, contraindications, and effects on conditions like obesity and skin health. In-class, a quick recap allows students to share insights before breaking into groups to discuss specific Udwartana types, key ingredients, dosha imbalances, and present their findings. This approach deepens understanding of Udwartana's applications in Ayurvedic practice
NLHT 2.7	Diet and Parihara Vishaya during Snehapana	Group Discussion In this group discussion activity, the class is divided into smaller groups, each assigned specific topics related to Snehapana. Topics include foods to avoid during Snehapana, such as heavy, cold, or spicy

		foods, along with the rationale behind each restriction. Another group focus on lifestyle modifications during Snehapana, discussing the importance of avoiding exertion, emotional stress, and exposure to extreme temperatures. Each group engages in thoughtful discussions and share their insights with the class. The activity concludes with a summary of key points and concluding remarks, reinforcing the significance of dietary and lifestyle considerations in optimizing the benefits of Snehapana therapy in Ayurvedic practice.
NLHT 2.8	Discussion on Accha sneha and Pravicharana sneha.	CBL / Group Discussion In this activity, students analyze case scenarios involving the use of different types of Sneha. For instance, one scenario features a patient requiring Accha Sneha for detoxification, while another involves a patient needing Pravicharana Sneha to address arthritis . Students identify the appropriate type of Sneha for each case, justifying their choices based on therapeutic principles, and outlining the method of administration. This exercise aims to deepen their understanding of the clinical applications and benefits of Sneha therapies in promoting health and wellness.
NLHT 2.9	Abhyanga in Swastha and Atura	Group Discussion Students are to be divided into teams to discuss the practice of Abhyanga as part of Dinacharya, focusing on its benefits for both healthy individuals and those with specific health concerns. Each group analyzes two case studies: one involving a healthy individual seeking Abhyanga for general well-being and the other involving a patient experiencing joint stiffness, fatigue, and pain. Students determine the appropriate oil for each case, considering factors such as dosha imbalances and therapeutic goals. They also discuss suitable techniques and strokes tailored to each individual's needs, along with the indications and contraindications for Abhyanga in these scenarios. After thorough analysis, groups present their conclusions, detailing the treatment approach for each case.
NLHT 2.10	Massaging Techniques	Video Demonstration Students watch video demonstrations or practice on mannequins, covering various massage techniques. These include Swedish Massage for relaxation, Deep Tissue Massage for muscle tension, Shiatsu for acupressure and energy flow, Hot Stone Massage for warmth and muscle relaxation, Aromatherapy Massage for emotional well-being, Sports Massage for injury prevention, Myofascial

		Release for fascia tension, and Reflexology for pressure points on the feet and hands. This exposure enhances students' understanding of diverse massage techniques and their benefits.
NLHT 2.11	Clinical application of Murdhni Taila	Case Based Learning Students are to be divided into small groups to discuss clinical cases where Murdhni Taila could be beneficial, such as chronic headaches, insomnia, or hair loss. Each group assesses the specific condition, evaluate the patient's Avastha ,and select the most suitable Murdhni Taila for their case. During their presentations, groups explain why Murdhni Taila is an effective treatment for the discussed condition, highlighting its therapeutic benefits such as enhancing brain function, promoting relaxation, and managing stress.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 2.1	Procedure of Udwartana.	Demonstration The instructor demonstrates Udwartana, covering preparation, herbal powder selection, and application techniques. Emphasizing strokes, pressure, and direction, students observe its effects on circulation and lymphatic drainage. Post-procedure care, including skin cleaning, follow-ups, and lifestyle advice, is explained. Students take notes to refine their understanding for future practice.
NLHP 2.2	Procedure of Udgharshana and Utsadana.	Demonstration (Same as Udwartana) • The instructor demonstrates the procedure, including: ◦ Preparation of medicated pastes. ◦ Patient positioning and sequence of application. ◦ Duration of paste retention and removal techniques

NLHP 2.3	Shodhanartha Snehapana procedure.	Case Based Learning Students present real or hypothetical cases of Shodhanartha Snehapana, analyzing the procedure, including Sneha selection, dosage, and observed outcomes. They evaluate Purva Karma, Sambhara Sangraha, and Atura Pariksha, focusing on Snehapana Matra Nirnaya, Snehapana Kala, and Sneha Anupana. The analysis includes Jeeryamana, Jeerna, and Ajeerna Lakshana, and oleation characteristics (Samyak, Asnigdha, and Ati Snigdha). Students discuss treatment for Asnigdha and Atisnigdha conditions and dietary considerations. The session concludes with a discussion on effectiveness and challenges in Snehapana.
NLHP 2.4	Shodhanartha Snehapana in Kushta and Vatarakta	Roleplay Students simulate consultations for Kushta or Vatarakta patients, focusing on dietary restrictions, lifestyle modifications, and Agni/Koshta assessment to determine the appropriate Sneha dose. They practice Sneha administration in pairs and design diet plans tailored to these conditions. A discussion on Samyak Snigdha Lakshana enhances their understanding of effective Ayurvedic treatment strategies. This activity equips students with the skills to manage these conditions effectively.
NLHP 2.5	Shamanartha Snehapana procedure.	CBL Students explore Shamanartha Snehapana through a clinical scenario, focusing on conditions like Vatarakta or Kushta. They begin with Purva Karma and Sambhara Sangraha, selecting appropriate medicated oils. During Atura Pariksha, they assess readiness with Atura Sidhata, determine Snehapana Matra , Snehapana Kala. Students practice administering the Sneha, observing oleation signs and potential adverse reactions. Post-procedure care includes dietary guidelines, lifestyle modifications, and identifying avoidances (Parihara Vishaya) to ensure effective treatment..

NLHP 2.6	Shamanartha Snehapana in Kushta and Vatarakta.	Debate Students are divided into two teams to debate whether Ghrita or Taila is more effective in treating Vatarakta. One team supports Ghrita for its nourishing properties and suitability for Pitta-dominant individuals, while the other favours Taila for its lubricating qualities and better absorption for Vata imbalances. The discussion covers properties, Dosha specificity, and patient tolerance. Similarly, the effectiveness of Shamanartha Snehapana in Kushta is also discussed.
NLHP 2.7	Sneha Vyapat and Chikitsa.	Symposium In this symposium on Sneha Vyapat, students analyze clinical case studies, such as nausea from excess Shamanartha Snehapana dosage and diarrhoea after Ghrita administration. Speakers highlight symptoms, errors in dosage, Sneha selection, and pre-procedure assessments. An interactive discussion follows, with students proposing treatment adjustments, dietary modifications, and corrective measures. Other Sneha Vyapat scenarios are also discussed, fostering critical thinking and emphasizing individualized treatment in Ayurveda
NLHP 2.8	Brumhana Snehapana and Sadya Snehana	Problem Based Learning Students are divided into groups to discuss Brumhana Snehapana with Ghrita or Taila, focusing on key steps like Purvakarma, Sambhara Sangraha, and Atura Pariksha to assess suitability. They determine appropriate dosage (Snehapana Matra Nirnaya), timing (Snehapana Kala), and Sneha Anupana for absorption. The Pradhanakarma involves careful administration, followed by Paschat Karma and dietary recommendations. Students also explore Sadya Snehana, discussing its types, dose, duration, and dietary guidelines, while assessing Samyak Snigdha Lakshana.
NLHP 2.9	Shiro Abhyanga Procedure	Demonstration Using illustrated charts and flipbooks, the instructor demonstrates Shiro Abhyanga without a live patient. Visual aids show step-by-step oil application, massage techniques, pressure points, and procedure duration. Labeled diagrams on a whiteboard or screen help students visualize the movements, while flipbooks guide them through each stage. Interactive discussions encourage students to analyze and explain key steps. This method enhances concept retention and understanding of Shiro

		Abhyanga fundamentals.
NLHP 2.10	Procedure of Shirodhara with Taila.	Demonstration The instructor guides students through the Taila Shirodhara procedure on a volunteer or mannequin. The session begins with Purva Karma, preparing the patient, recording vital signs, and performing a brief Abhyanga on the head, neck, and shoulders. During Pradhana Karma, the instructor demonstrates setting up the dhara pot and pouring warm medicated oil in a continuous stream over the forehead. In Paschat Karma, students learn to remove excess oil, apply Rasnadichurna, and advise the patient to rest post-treatment. This demonstration enhances understanding of Taila Shirodhara's therapeutic techniques.
NLHP 2.11	Shiropichu demonstration.	Demonstration The instructor guides students through the Shiropichu procedure on a volunteer or mannequin. The session begins with Purva Karma, preparing the patient, explaining the procedure, obtaining consent, and gathering materials like medicated oil and sterile cotton pads. During Pradhana Karma, the instructor demonstrates soaking the cotton pad in warm oil and placing it securely on the crown of the head. In Paschat Karma, students learn to remove the Pichu after 30-60 minutes and gently clean the scalp, providing post-treatment care instructions. The procedure may also be demonstrated using a pre-recorded video or 3D animation.
NLHP 2.12	Shirobasti demonstration	Demonstration The instructor guide students through the step-by-step procedure of Shirobasti. The session begins with Purva Karma, which involves patient preparation. During Pradhana Karma, the instructor demonstrates how to securely fit a leather cap on the patient's head, fill it with warm medicated oil, and maintain the temperature throughout the treatment. Finally, in the Paschat Karma phase, students observe how to properly remove the oil, conduct a gentle massage on the neck and shoulders, and advise the patient on post-treatment care.
NLHP 2.13	Sthanika Basti demonstration.	Demonstration

		The instructor illustrate the step-by-step procedure of Sthanika Basti on a volunteer or mannequin. The session begins with Purva Karma, which involves preparing the patient and the environment, including preparation of moulds and warming the medicated oil. During the Pradhana Karma, the instructor demonstrates the application of the warm medicated oil ensuring proper placement and duration for optimal therapeutic effects. Finally, in the Paschat Karma phase, students learn about post-procedure care, including observing the patient for any reactions and ensuring proper removal of any residual oil.
NLHP 2.14	Procedure of Abhyanga	Demonstration The instructor guides students through the Abhyanga procedure using a volunteer or mannequin. The session begins with Purva Karma, preparing the environment and warming the oil. During Pradhana Karma, the instructor demonstrates the massage technique, emphasizing long strokes on limbs and circular motions on joints. In Paschat Karma, students learn post-massage care, allowing the oil to absorb before taking a warm shower. This approach enhances students' practical skills and understanding of therapeutic effects of Abhyanga

Topic 3 Swedana Karma (LH :9 NLHT: 4 NLHP: 10)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1	Describe definition of Sweda,Swedana karma and classsification of Swedana karma with its Guna.	CK	MK	K	TBL,L &PPT	CL-PR,S-LAQ	F&S	I	-	LH
CO1	Describe Guna and Karma of Sweda and Swedopaga Dravya.	CK	MK	K	L&PPT ,ML	CL-PR,QZ ,S-LAQ	F&S	I	-	LH
CO2, CO3	Explain indications and contraindications of Swedana Karma.	CC	MK	KH	CBL,BL ,BS,L& PPT	CL-PR,S-LAQ	F&S	I	-	LH

CO3	Explain indications, contraindications and method of application of Chaturvidha Sweda.	CC	MK	KH	L&PPT,PER,DIS	COM,S-LAQ,CL-PR,QZ	F&S	I	-	LH
CO3	Distinguish the method of application of Sankara Sweda and Nadi Sweda procedure.	CC	MK	KH	PER,L_VC,TBL	COM,CL-PR	F&S	I	-	LH
CO2	Interpret the Samyak Swedana Lakshana, Ayoga Lakshana and Atiyoga Lakshana.	CC	MK	KH	L&PPT,PBL,TBL,PER	CL-PR,S-LAQ	F&S	I	-	LH
CO3	Analyze the principles of practice of Swedana Karma in the clinical conditions of Sandhigata Vata, Vatarakta, Pakshaghata, Ardita, Gridhrasi and Amavata.	CAN	MK	KH	PER,TBL,CBL	S-LAQ,M-POS,QZ	F&S	I	-	LH
CO2, CO3, CO4	Analyze the fitness of Sweda in a patient posted for the procedure.	CAN	MK	KH	D-BED,PER,L&GD,RP	CHK,CL-PR	F&S	I	-	LH
CO1, CO4	Explain Swedana Karmukata.	CC	MK	KH	L&PPT,PER,FC	S-LAQ	F&S	I	-	LH
CO4, CO7	Explain the Mechanism of Sweating and Thermoregulation in the context of Swedana	CC	MK	KH	L_VC,DIS,FC	CL-PR,S-LAQ	F	I	-	NLHT3.1
CO1, CO3	Discuss the indications of Sweda Karma .	CC	MK	KH	DIS,CBL	CL-PR	F&S	I	-	NLHT3.2
CO1, CO3	Discuss the contraindications of Sweda Karma	CC	MK	KH	BS,CBL	CBA,PRN	F&S	I	-	NLHT3.3
CO3, CO4,	Demonstrate Tapa Sweda.	PSY-GUD	MK	SH	KL,SIM,D-	DOPS,DOPS,CBA	F&S	I	-	NLHP3.1

CO5					M,TBL					
CO3, CO4, CO5	Demonstrate Upanaha Sweda.	PSY-GUD	MK	KH	D-M,SIM,KL	DOPS,PP-Practical	F&S	I	-	NLHP3.2
CO3, CO4, CO5	Demonstrate Parisheka Sweda.	PSY-GUD	MK	SH	D,D-M,KL	DOAP,DOPS,CBA	F&S	I	-	NLHP3.3
CO3, CO4, CO5	Demonstrate Avagaha Sweda.	PSY-GUD	MK	SH	D,PT	P-PRF,DOAP,DOPS	F&S	I	-	NLHP3.4
CO3, CO4, CO5	Demonstrate Nadi Sweda.	PSY-GUD	MK	SH	PT,D,KL	DOPS,OSPE	F&S	I	-	NLHP3.5
CO3, CO4, CO5	Demonstrate practice of Swedana Karma in Sandhigata Vata, Pakshaghata, Ardita,Gridhrasi and Amavata.	PSY-GUD	MK	SH	TBL,D,CBL,PER,KL	P-CASE,CBA,DOPS	F&S	I	-	NLHP3.6

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 3.1	Mechanism of sweating	Discussion (Concept Mapping) In this activity, students create a concept map on sweating and thermoregulation in small groups. They discuss key concepts like the role of sweat glands, neurotransmitters in thermoregulation, and the relationship between sweating and dosha balance in Ayurveda. Students explore how Swedana affects Kapha by generating heat and Vata by mobilizing toxins. After completing their maps, groups present their findings, fostering a collaborative learning environment that enhances understanding of both physiological and Ayurvedic perspectives.

NLHT 3.2	Indications of Sweda Karma	Case Based Learning Students engage in a collaborative activity where they are presented with clinical case scenarios, such as patients with obesity, joint pain, or skin disorders like eczema. In pairs or small groups, they discuss whether Sweda Karma would be appropriate for these conditions and the rationale behind their decisions. Students link each condition to specific dosha imbalances, exploring how Swedana can promote detoxification and balance the doshas. This discussion fosters critical thinking about applying Ayurvedic principles in clinical practice. By the end of the session, students gain a deeper understanding of how Sweda Karma can be effectively integrated into treatment plans for various health issues.
NLHT 3.3	Contraindications of Sweda Karma	Brainstorming Students are divided into small groups to brainstorm the contraindications for Swedana based on prior knowledge. Each group discusses conditions or situations where Swedana would be inappropriate, such as fever, dehydration, pregnancy, weakness, acute infections, skin disorders, and heart conditions. Afterward, each group shares their findings with the class, fostering collaboration and exploring the reasons behind these contraindications. This activity aims to enhance understanding of patient safety in Ayurvedic practices and the importance of careful assessment before administering therapeutic interventions.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 3.1	Tapa Sweda procedure.	Team Based Learning Students work in groups to practice the procedure with a volunteer, mannequin, or patient under the instructor's guidance. In the Purva Karma phase, teams prepare the patient and gather materials, discussing pre-treatment assessments. During Pradhana Karma, they apply heated materials like hot sand or stones to induce sweating, explaining how it alleviates conditions like Ama Vata. In Paschat Karma, teams discuss post-treatment care, including hydration and dietary recommendations. This activity promotes teamwork and practical understanding therapeutic applications of Tapa Sweda.

NLHP 3.2	Upanaha Sweda procedure	Simulation Students simulate the procedure using a volunteer, mannequin, or model limb under the instructor's guidance. They prepare a Vatahara herbal paste and ensure the skin is clean during Purva Karma. In Pradhana Karma, students apply the paste to the affected area, cover it with leaves, and secure it with a bandage to retain heat. During Paschat Karma, they remove the paste after the recommended duration, clean the area with lukewarm water, and discuss post-treatment care. This simulation enhances procedural skills and clinical understanding for real-world application.
NLHP 3.3	Parisheka Sweda procedure.	Kinaesthetic learning In the Parisheka Sweda activity, students participate in the procedure under the instructor's guidance. They assist in the Purva Karma phase by preparing the patient with Abhyanga. During Pradhana Karma, students take turns pouring warm medicated liquids to induce sweating, ensuring proper technique and temperature. In the Paschat Karma phase, they practice post-treatment care, including advice for bathing, hydration, and rest. This hands-on experience enhances students' understanding of Parisheka Sweda's therapeutic applications in Ayurveda.
NLHP 3.4	Avagaha Sweda procedure.	Demonstration The instructor demonstrates the Avagaha Sweda procedure using a volunteer, mannequin, or patient. In the Purva Karma phase, the patient undergoes Abhyanga to relax and warm the body. During Pradhana Karma, the patient is immersed in a tub filled with warm medicated liquid, ensuring comfort and effective sweating. The instructor monitors the temperature to maintain optimal conditions. In the Paschat Karma phase, the instructor guides post-treatment care, including skin cleansing and recommendations for hydration and rest. This demonstration provides students with practical insights into therapeutic applications of Avagaha Sweda.
NLHP 3.5	Nadi Sweda procedure.	Demonstration The instructor demonstrates the Nadi Sweda procedure using a volunteer, mannequin, or patient. In the

		Purva Karma phase, the patient undergoes Abhyanga to warm and relax the body. During Pradhana Karma, steam infused with therapeutic herbs is directed towards the affected body part using the Nadi Sweda Yantra, promoting sweating. In the Paschat Karma phase, the instructor guides the patient through post-treatment care, focusing on hydration and rest for recovery
NLHP 3.6	Clinical application of Sweda	Case Based Learning Students engage in an interactive session on Swedana Karma for conditions like Sandhigata Vata, Pakshaghata, Ardita, Gridhrasi, and Amavata. Divided into small groups, they discuss the pathophysiology of assigned conditions. The instructor then delivers a brief lecture on Swedana Karma's mechanism and therapeutic effects. Case studies provide practical context, followed by a live demonstration where the instructor explains procedural modifications for each condition. The session concludes with feedback emphasizing the importance of personalized Ayurvedic therapies.

Topic 4 Special Procedures: Sankara Sweda, Ksheeradhooma, Pizhichil, Dhanyamladhara, Takradhara, Thalam and Thalapothichil and Annalepa (LH :7 NLHT: 9 NLHP: 19)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO3	Explain the definition, types, procedure and benefits of Sankara Sweda	CC	MK	KH	L&PPT	S-LAQ,COM,QZ	F	II	-	LH
CO2, CO3	Explain the definition, types, procedure and benefits of Ksheeradhooma	CC	MK	KH	L&PPT ,CBL	QZ ,S-LAQ	F	II	-	LH
CO2, CO3	Explain the definition, types, procedure and benefits of Pizhichil	CC	MK	KH	L_VC,L &PPT	CL-PR,S-LAQ	F	II	-	LH
CO2, CO3	Comprehend the definition, types, procedure and benefits of Dhanyamladhara	CC	MK	KH	L_VC,L &PPT	PRN	F	II	-	LH

CO2, CO3	Explain the definition, types, procedure and benefits of Takradhara	CC	MK	KH	L&PPT ,L_VC	CL-PR	F	II	-	LH
CO2, CO3	Explain the definition, types, procedure and benefits of Thalam and Thalapothichil	CC	MK	KH	L&PPT	CBA	F	II	-	LH
CO2, CO3	Interpret the definition, types, procedure and benefits of Annalepa	CC	MK	KH	L&PPT	DOPS,S-LAQ,DOPS	F	II	-	LH
CO3	Demonstrate the preparation, procedure of various Sankara Sweda with their therapeutic indications .	PSY-GUD	MK	SH	W,D-M, TPW,KL	DOPS,OSPE,P-PRF	F&S	II	-	NLHP4.1
CO3	Demonstrate the procedure of Ksheeradhooma with therapeutic indications .	PSY-GUD	MK	SH	D,SIM, PT,KL	DOPS,P-PRF	F&S	II	-	NLHP4.2
CO3	Demonstrate the procedure of Pizhichil with therapeutic indications	PSY-GUD	MK	SH	KL,D	P-PRF,OSPE,DOPS	F&S	II	-	NLHP4.3
CO3	Demonstrate the procedure and preparation of Dhanyamladhara with its therapeutic indications.	PSY-GUD	MK	SH	D	OSPE,DOPS,P-PRF	F&S	II	-	NLHP4.4
CO3, CO5	Demonstrate the procedure and preparation of Takradhara with its therapeutic indications.	PSY-GUD	MK	SH	D	DOPS,OSPE,P-PRF	F&S	II	-	NLHP4.5
CO3, CO5	Demonstrate the procedure and preparation of Thalam and Thalapothichil with their therapeutic indications .	PSY-GUD	MK	SH	D,KL,SIM	OSPE,DOPS	F&S	II	-	NLHP4.6
CO3, CO4, CO5	Demonstrate the procedure and preparation of Annalepa with its therapeutic indications .	PSY-GUD	MK	SH	KL,D-M	RK,DOPS, OSPE	F&S	II	-	NLHP4.7
CO1	Discriminate regional variations in practice of Pizhichil	CAN	MK	KH	LS,PL,IBL,PER	DEB,COM	F	II	-	NLHT4.1
CO1	Comprehend the concept of Sankara Sweda	CC	MK	KH	PL,TBL	CL-PR,INT	F	II	-	NLHT4.2

					,DIS	,COM				
CO1	Identify and categorise various drugs used for Thalam and Thalapothichil	CAN	MK	KH	PrBL,DIS,LS	COM,T-OBT,QZ	F	II	-	NLHT4.3
CO1, CO3	Comprehend the utility of Thalapothichil	CC	MK	KH	PBL,CBL	SP,P-PS	F	II	-	NLHT4.4
CO1, CO4	Comprehend the procedure of Takradhara	CC	MK	KH	PL,TBL,BL	M-POS,COM,PRN	F	II	-	NLHT4.5
CO1, CO3	Identify variations in practice of Takradhara	CAP	MK	KH	DIS,LS,TBL	CL-PR,COM	F	II	-	NLHT4.6
CO1, CO3	Infer the clinical utility of Dhanyamla	CAP	MK	KH	IBL,CBL,DIS	COM,DEB,CL-PR	F	II	-	NLHT4.7

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 4.1	Interactive learning on regional variations in practice of Pizhichil	Group Discussion Students discuss regional variations in the practice of Pizhichil. Each group explores differences in oil selection, therapist involvement, oil application methods, patient positioning, duration, and specific conditions treated. They present their findings, comparing how these variations influence the effectiveness of the therapy. A classroom discussion follows, where students analyze the benefits and challenges of each approach. The faculty concludes by summarizing key differences and explaining their clinical significance, helping students appreciate the adaptability of Pizhichil in different regions.
NLHT 4.2	Interactive learning on Sankara Sweda	Jigsaw learning The class divides into four groups, each focusing on a specific aspect of Sankara Sweda: materials and preparation, procedure and techniques, indications and benefits, and precautions and contraindications. Each group discusses their topic and prepares a summary. They then form mixed groups where each student teaches their topic to peers, ensuring collective learning and a comprehensive understanding of

		all aspects.
NLHT 4.3	Compilation of drugs used for Thalam and Thalapothichil	Team Based Learning Students form small groups and classify the drugs used for Thalam and Thalapothichil based on their type (herbs, oils, pastes, liquids, etc.), dosha specificity, and conditions treated (neurological, psychiatric, dermatological, etc.). Each group discusses their classification and prepares a summary. They then present their findings to the class, followed by a faculty-led discussion that clarifies doubts and highlights the clinical significance of different materials.
NLHT 4.4	Utilty of Thalapothichil	Case Based Learning Divide students into small groups.Each group receives a unique patient scenario, such as a patient with insomnia, migraine, or scalp disorders, and engages in a discussion to analyze the condition based on Ayurvedic principles. They identify the predominant dosha imbalance and determine whether Thalam or Thalapothichil is the most suitable therapy. Using their knowledge of medicinal herbs, oils, and pastes, they carefully select the appropriate materials, considering their therapeutic properties and mode of action. Groups then justify their choices by explaining the rationale behind ingredient selection, expected benefits, and potential modifications based on patient-specific factors. This process encourages critical thinking and a deeper understanding of formulation selection in clinical practice.
NLHT 4.5	Interactive discussion on the procedure of Takradhara	Peer learning The class divides into four groups, each focusing on a specific aspect of Takradhara: preparation of Takra , patient preparation and positioning, procedure and technique, and post-procedure care with indications and contraindications. Each group discusses their assigned topic, compiles key points, and prepares a summary. Afterward, the groups reorganize into mixed teams, where each student teaches their assigned aspect to their peers. This process ensures collective learning, allowing every student to gain a comprehensive understanding of the entire procedure through peer interaction and discussion.
NLHT 4.6	Variations in practice of Takradhara	Team Project work Students compare and contrast classical and regional variations of Takradhara, analyzing differences in

		formulations, procedural techniques, and therapeutic applications across Ayurvedic traditions. Keraleeya Panchakarma practices, application in different wings of Ayurveda like Kayachikitsa, Manas Roga, Shalakya Tantra , Koumarabhritya and Prassoti Tantra. By engaging in case-based discussions and analyzing real-world applications, students learn to adapt and apply these variations in clinical practice, ensuring optimal patient care based on individual needs.
NLHT 4.7	Clinical utility of Dhanyamla	Case Based Learning Divide students into small groups.Each group receives a patient case scenario, such as a patient with rheumatoid arthritis, psoriasis, or diabetic neuropathy, and analyzes the condition based on Ayurvedic principles. They determine the appropriateness of Dhanyamla for the given case and discuss the mode of application of Dhanyamla, selecting suitable mode of use based on the patient's dosha imbalance and pathology. The group explores necessary procedure modifications for Dhanyamladhara including temperature adjustments, duration, and method of application, to ensure patient safety and maximize therapeutic effectiveness. They also identify the expected benefits, potential contraindications, and necessary precautions during and after the therapy. Each group then presents their treatment approach to the class, followed by peer feedback and faculty insights, ensuring a deeper understanding of clinical decision-making and personalized patient care.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 4.1	Procedure of Sankara Sweda	Demonstration The instructor begins the demonstration by providing a brief overview of the Sankara Sweda procedure. The practical session follows a step-by-step approach, starting with material collection, where necessary herbs and ingredients are gathered. Next, the preparation of the patient is essential to ensure comfort and readiness for treatment. The teacher then demonstrates the preparation of materials, showcasing how to create different types of Pottali, including Choorna Pinda Sweda, Jambeera Pinda Sweda, Patrapotala Sweda, and Shahtika Sali Pinda Sweda. Following this, the application of the procedure is illustrated, emphasizing the correct techniques for administering the boluses. Finally, Paschat Karma instructions are provided to guide participants on post-treatment care

		and recommendations, ensuring a comprehensive understanding of the Sankara Sweda process.
NLHP 4.2	Demonstration of procedure of Ksheeradhooma	Kinaesthetic learning The instructor gives a brief overview of the Ksheeradhooma procedure. In the practical session, participants start by gathering the essential ingredients: milk and a suitable herbal decoction. They then prepare the patient, ensuring comfort and readiness. The instructor demonstrates how to make Ksheera, mixing milk with the herbal decoction to create a therapeutic infusion. Participants practice applying the procedure, following standard operating procedures to master the techniques for effective Ksheeradhooma. The session wraps up with Paschat Karma instructions, guiding participants on post-treatment care to enhance the benefits and ensure a complete understanding of the procedure.
NLHP 4.3	Demonstration of the procedure of Pizhichil	Kinaesthetic learning The instructor starts with a brief overview of Pizhichil. In the practical session, participants first collect the materials, including oil for Seka and Thalam, Rasnadi Choorna, muslin cloth, and vessels for heating the oil. They then prepare the patient, ensuring comfort and readiness. The instructor demonstrates how to heat the oil to the right temperature for optimal therapeutic effect. Participants practice applying the procedure according to standard operating procedures, learning the correct techniques for effective Pizhichil application. The session ends with Paschat Karma instructions, guiding participants on post-treatment care to maximize the benefits of this rejuvenating therapy.
NLHP 4.4	Demonstration of Dhanyamladhara procedure	Simulation The instructor begins with a brief introduction to the Dhanyamladhara procedure. In the simulation practical, participants first collect the materials, including Dhanyamla, Varshulika (pots), and Rasnadi Choorna. They then prepare the patient for comfort and readiness. The instructor demonstrates how to heat the Dhanyamla to the correct temperature for effective application. Participants practice applying the procedure following standard operating procedures, ensuring they learn the proper techniques. The session concludes with the instructor providing Paschat Karma instructions, guiding participants on post-treatment care and recommendations to maximize therapeutic benefits.

NLHP 4.5	Demonstration of Takradhara procedure	Demonstration The instructor provides a concise overview of the Takradhara procedure. The practical session begins with material collection, which includes essential items such as Ksheera , herbs for preparing Kashaya, and appropriate Dhara vessels. Following this, the preparation of the patient is emphasized to ensure comfort and readiness for the therapy. The teacher then demonstrates the preparation of Takra. The application of the procedure is conducted ensuring proper technique and effectiveness in delivering the treatment. Finally, the teacher provides Paschat Karma instructions, offering guidance on post-treatment care and recommendations to enhance the benefits of Takradhara, thus ensuring participants gain a comprehensive understanding of this therapeutic practice.
NLHP 4.6	Demonstration of Thalam and Thalapothichil procedure	Kinaesthetic Learning The instructor starts by providing a brief overview of the Thalam and Thalapothichil procedures. In the practical session, participants first collect the materials, including herbal powders, herbal decoction, and oil. They then prepare the patient for comfort and readiness. The instructor demonstrates how to prepare the herbal paste for both procedures. Participants follow along, learning to apply the paste to the scalp using the correct techniques. Finally, the instructor explains Paschat Karma, guiding participants on post-treatment care and recommendations for optimal benefits,
NLHP 4.7	Demonstration of Annalepa procedure	Demonstration The instructor begins with a brief overview of the Annalepa procedure. The practical session commences with material collection, which includes essential ingredients such as Shashtikashali , milk, and a suitable herbal decoction. Following this, the preparation of the patient is to be emphasized to ensure their comfort and readiness for the treatment. The teacher then demonstrates the preparation of the material, illustrating the process of making Annalepa, which involves combining the rice, milk, and herbal decoction to create a paste for application. The application of the procedure is to be conducted according to standard operating procedures , ensuring participants learn the correct techniques for administering Annalepa effectively. Finally, Paschat Karma instructions are to be provided, offering guidance on post-treatment care and recommendations to enhance the therapeutic effects of this nourishing treatment, thus ensuring a comprehensive understanding of the Annalepa procedure.

Topic 5 Physiotherapy (LH :6 NLHT: 1 NLHP: 7)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO7	Define Physiotherapy and describe the scope and importance of Physiotherapy in practice.	CK	MK	K	L&PPT	S-LAQ	F&S	II	-	LH
CO7	Explain the physiological benefits of Static exercises	CC	MK	KH	L&PPT	S-LAQ	F&S	II	-	LH
CO7	Explain the physiological benefits of Isotonic exercises.	CC	MK	KH	L&PPT	S-LAQ	F&S	II	-	LH
CO7	Distinguish the physiological effects of deep heating modalities & Superficial heating modalities	CC	MK	KH	L&PPT	S-LAQ	F&S	II	-	LH
CO7	Explain the clinical indications & physiological effects of Electrotherapy	CC	MK	KH	L&PPT	S-LAQ	F&S	II	-	LH
CO7	Interpret the specific applications & physiological effects of Manual therapy	CC	MK	KH	L&PPT ,BL	S-LAQ	F&S	II	-	LH
CO7	Demonstrate the Isotonic exercises,benefits and proper techniques to perform.	PSY-GUD	MK	KH	D-M,CBL,KL	OSPE,DOAP,P-PRF,CBA	F&S	II	-	NLHP5.1
CO7	Demonstrate Superficial heating modalities and Deep heating modalities.	PSY-GUD	DK	SH	KL,CBL	DOAP,OSCE,DOPS	F&S	II	-	NLHP5.2
CO7	Demonstrate Interferential Therapy (IFT) , Transcutaneous Electrical Nerve Stimulation (TENS) and Muscle Stimulation Therapy (MST)	PSY-GUD	DK	SH	KL,CBL	OSCE,DOAP	F&S	II	-	NLHP5.3
CO7	Demonstrate Manipulation techniques for Shoulder joint, Knee joint and Spine disorders	PSY-GUD	DK	SH	PT,KL,D	P-PRF,OSCE,DOPS	F&S	II	-	NLHP5.4
CO1, CO7	Relate the integration of Physiotherapy and Ayurvedic approaches	CAP	MK	KH	DIS,BS,CBL	Log book,PM	F&S	II	-	NLHT5.1

Non Lecture Hour Theory		
S.No	**Name of Activity**	**Description of Theory Activity**
NLHT 5.1	Discussion on Integration of Physiotherapy and Ayurvedic approaches	Brainstorming The class divides into small groups, each brainstorming on Ayurvedic and Physiotherapy approaches for musculoskeletal and neurological conditions. They explore common principles shared between the two disciplines, such as Marma therapy and trigger point therapy, or Kati Basti and lumbar traction, while also identifying differences in therapeutic goals and techniques. Each group compiles key insights and presents their findings, followed by a faculty-led discussion to refine understanding and highlight the integrative potential of both systems in patient care.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 5.1	Procedure of Isometric and Isotonic Exercise	Kinaesthetic learning The instructor chooses a spacious area and assumes the correct stance, ensuring proper alignment. They guide a volunteer through each movement, demonstrating the postures while explaining the benefits and techniques. The volunteer actively follows along, feeling the stretch and engagement of each muscle. After completing the exercises, they take a brief resting period to recover and reflect. The instructor then sets the number of repetitions, encouraging a gradual increase in intensity. This interactive approach allows participants to experience the exercises firsthand, enhancing their understanding through movement.
NLHP 5.2	Procedure of Superficial heating modalities and Deep Heating Modalities.	Simulation In a simulated session, a volunteer performs exercises as the instructor demonstrates movements, explaining posture and benefits. Participants observe, analyze form, provide feedback, and discuss corrections. After a brief rest, the instructor assigns repetitions, encouraging coaching practice. This structured approach integrates observation, analysis, and hands-on learning.

NLHP 5.3	Procedure of Interferential Therapy (IFT) , Transcutaneous Electrical Nerve Stimulation (TENS) and Muscle Stimulation Therapy (MST)	Demonstration The instructor demonstrates IFT, TENS, and MST procedures, beginning with patient assessment and reviewing medical history for safety. Essential materials, including electrodes and respective machines, are gathered before setup. For IFT, electrodes are placed near the pain area, delivering mild electrical currents for 20–30 minutes to stimulate nerves and muscles. In TENS, electrodes target pain distribution, administering impulses for about 20 minutes to relieve discomfort. MST involves electrode placement for muscle contraction, aiding rehabilitation and strength. Each demonstration concludes with post-treatment care instructions, emphasizing recovery, hydration, and follow-up exercises for optimal results.
NLHP 5.4	Procedure of Manual therapy	Demonstration The instructor demonstrates manual therapies on a volunteer, including basic massage techniques for relaxation and circulation, joint mobilization for the shoulder, knee, and spine, and myofascial release to reduce tension. Techniques such as scapular manipulation for shoulder dislocations and mobilization for knee and spinal joints are showcased to enhance flexibility and relieve stiffness. Emphasizing proper technique, patient comfort, and therapeutic benefits, the session provides participants with a practical understanding of effective manual therapy applications.

Topic 6 Vamana Karma (LH :13 NLHT: 7 NLHP: 15)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO3	Define Vamana and describe the indications and contraindications of Vamana Karma	CK	MK	K	L&PPT ,REC,D IS	S-LAQ,P-REC	F&S	II	-	LH
CO1, CO3	Explain the indications and contraindications of Vamana Karma	CC	MK	KH	CBL,L &GD	PRN,QZ	F&S	II	-	NLHT6.1
CO2, CO4	Explain the Purva Karma of Vamana with Sambhara Sangraha & Atura Pariksha.	CC	MK	KH	CBL,L_ VC,L&	S-LAQ	F&S	II	-	LH

					PPT					
CO2, CO4	Explain Atura Siddhata including Abhyantara Snehapana, Vishrama Kala procedures and Vamaka Yoga preparation with anupana and dose	CC	MK	KH	L&PPT ,L_VC	S-LAQ,CL-PR	F&S	II	-	LH
CO2, CO4	Explain Pradhana Karma with administration of Vamana Yoga, analysis of Lakshana indicating Doshagati, management during Vamana Karma and observation of Vega	CC	MK	KH	L_VC	CBA,S-LAQ	F&S	II	-	LH
CO2, CO4	Explain the symptoms of Samyak, Ayoga, Atiyoga with Chikitsa of Ayoga and Atiyoga	CC	MK	KH	L_VC	S-LAQ,M-CHT	F&S	II	-	LH
CO2, CO4	Explain Paschat Karma including assessment of Shuddhi, Dhoomapana & Kavala, Samsarjana Krama and Parihara Vishaya of Vamana	CC	MK	KH	CBL,L &PPT ,PBL	CBA,S-LAQ	F&S	II	-	LH
CO4, CO6	Explain Vamana Vyapat and Chikitsa	CC	MK	KH	L&PPT	S-LAQ	F&S	II	-	LH
CO3	Explain the concept of Sadyo Vamana	CC	MK	KH	CBL,L &PPT ,L_VC	S-LAQ	F&S	II	-	LH
CO1, CO3	Explain Vamana Karmukata	CC	MK	KH	L&PPT ,L_VC	S-LAQ	F&S	II	-	LH
CO1, CO3	Analyze the principles of practice of Vamana in Kushta	CAN	MK	KH	CBL,PBL	PRN	F	II	-	LH
CO1, CO3	Analyze the principles of practice of Vamana in Shwasa	CAN	MK	KH	CBL,RP ,PBL	PRN	F	II	-	LH
CO1, CO3	Analyze the principles of practice of Vamana in Yuvanapidaka	CAN	MK	KH	PBL,CBL	PRN	F	II	-	LH

CO1, CO3	Analyze the principles of practice of Vamana in Amlapitta	CAN	MK	KH	CBL,ML,PBL	PRN	F	II	-	LH
CO2	Enlist and Identify Vamana and Vamanopaga dravya and describe the properties of Vamana drugs	CK	MK	KH	L&PPT,DG	P-ID	F&S	II	V-DG	NLHT6.2
CO3	Prepare a disease wise Vamana Purva Karma chart	CAP	MK	KH	CBL	PRN	F	II	-	NLHT6.3
CO4, CO8	Illustrating patient counselling for Vamana karma	CAN	MK	KH	RP,DL	CL-PR	F	II	-	NLHT6.4
CO4	Show comprehensive knowledge of Vamana Paschat Karma	CAP	MK	KH	PL,CBL,RP,DIS	PRN	F	II	-	NLHT6.5
CO3	Comprehend the concept of Sadyo Vamana	CC	MK	KH	PL,DIS	T-OBT,M-CHT	F	II	-	NLHT6.6
CO5	Demonstrate Purva Karma of Vamana	PSY-GUD	MK	SH	D	OSPE,DOPS	F&S	II	-	NLHP6.1
CO5	Demonstrate Pradhana Karma of Vamana	PSY-GUD	MK	SH	D,W,KL	OSPE	F&S	II	-	NLHP6.2
CO5	Demonstrate Paschat Karma of Vamana	PSY-GUD	MK	SH	D	OSPE	F&S	II	-	NLHP6.3
CO5	Demonstrate Sadyo Vamana	PSY-GUD	MK	SH	CBL,D	CBA,OSPE	F&S	II	-	NLHP6.4
CO5	Demonstrate Vamana Karma in Shwasa	PSY-GUD	MK	KH	D,CBL,L&PPT,PBL	DOPS,OSCE,CBA	F&S	II	-	NLHP6.5
CO5	Demonstrate Vamana Karma in Amlapitta	PSY-GUD	MK	SH	TBL,CBL,PBL,D	CBA,DOPS,OSCE	F&S	II	-	NLHP6.6

CO5	Demonstrate Vamana Karma in Kushta	PSY-GUD	MK	SH	D,CBL	DOPS,OSCE,CBA	F&S	II	-	NLHP6.7

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 6.1	Indications and contraindications of Vamana Karma	Case-Based Learning Students analyze clinical cases involving Kapha disorders and Medoroga, determining whether Vamana is indicated or contraindicated. Each group evaluates symptoms and medical history, justifying their conclusions. The instructor facilitates discussions, encouraging critical thinking. Groups present their findings, reinforcing clinical decision-making and the therapeutic applications of Vamana in practice.
NLHT 6.2	Identification of Vamana and Vamanopaga Dravya	Group Discussion Students work in small groups, each assigned a specific task. One group classifies Vamana Dravya, another explores Vamanopaga Dravya, and a third conducts a detailed study of Madanaphala, analyzing its Rasa, Guna, Veerya, Vipaka, and Prabhava. Groups organize findings using charts or digital tools and present their insights. The session concludes with a guided visit to the herbal garden or Dravyaguna museum for direct observation, reinforcing theoretical concepts through practical exposure.
NLHT 6.3	Preparation of disease wise Vamana Purva Karma chart	Making of Charts The Vamana Purvakarma chart outlines key preparatory steps for effective therapeutic emesis. It begins with Deepana-Pachana to enhance digestion, followed by Abhyantara Snehana with medicated ghee or oil and BahyaSnehana, Swedana and Dietary guidelines during Sneha Sweda and on the day prior to Vamana (Utklesha diet).The chart shall also include psychological preparation which helps patients stay relaxed and informed. This structured approach optimizes Vamana therapy outcomes.
NLHT 6.4	Roleplay on patient communication for Vamana	Roleplay

	Karma	Students role-play as Patient and Practitioner to practice patient counseling. The Practitioner establishes rapport, explains Vamana Karma—its purpose, indications (e.g., Kapha disorders), and Purva Karma preparation. They detail the procedure, expected outcomes, benefits (e.g., improved digestion, detoxification), and possible discomforts. Post-procedure care is outlined, and patient concerns are addressed with reassurance. The session concludes with obtaining written consent, reinforcing collaboration. This exercise enhances communication skills and deepens practical understanding of Vamana therapy.
NLHT 6.5	Interactive discussion on Paschat Karma	Group discussion Participants are divided into groups, each assigned specific topics: diet regimen (Samsarjana Krama), lifestyle modifications, and management of complications such as dehydration and fatigue. Each group will conduct research on their topic and then teach their findings to other participants, fostering a collaborative learning environment.
NLHT 6.6	Peer learning on the concept of Sadyo Vamana	Peer learning Participants will be assigned specific topics to prepare, including the definition and importance of Sadyo Vamana, indications and contraindications, steps of the procedure, complications and their management, and a comparison with classical Vamana. Following this, participants will be divided into small groups to discuss their topics and prepare presentations. The session will conclude with a summary of key takeaways, incorporating insights from all participants to enhance understanding of Vamana.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 6.1	Demonstration of Vamana Purva Karma in a patient	Kinaesthetic learning Students actively participate in each step of Vamana Purva Karma. They begin by collecting and organizing all necessary tools and herbal preparations. They then assess Agni and Koshta to determine the patient's readiness for Vamana therapy. Students perform Abhyantara Snehana and Swedana,

		applying oil and heat therapy to prepare the body. They engage in selecting an appropriate Vamaka Dravya based on the patient's condition, discussing its properties and effects. Finally, they collaborate in planning dietary guidelines to optimize patient readiness, ensuring hands-on learning and deeper understanding of Vamana Purva Karma.
NLHP 6.2	Pradhana Karma of Vamana in a patient	Kinaesthetic learning Students actively participate in gathering and organizing all necessary tools and medications. They engage in preparing the patient by explaining the procedure and obtaining informed consent. Students then set up and arrange the required medications for easy access. During the application of the procedure, they administer Vamana yoga and assist in Akanta pana to induce vomiting. They observe and assess Vega and Upavega, actively monitoring signs of Samyak, Ayoga, and Atiyoga. Throughout the process, they apply appropriate Chikitsa for any deviations, ensuring hands-on learning and a deeper understanding of the Vamana procedure .
NLHP 6.3	Demonstration of Paschat Karma of Vamana	Kinaesthetic learning Students participate by performing the assessment of Shuddhi to evaluate the purification achieved through Vamana and allied therapies, including monitoring the effectiveness of Dhoomapana and Kavala practices. They collaborate in providing dietary guidelines that support recovery. Students also engage in discussions about Parihara Vishaya, exploring lifestyle modifications to prevent disease recurrence. Finally, they actively discuss Vamana Vyapat and Chikitsa, focusing on the indications and treatment protocols for Vamana therapy, ensuring a hands-on understanding of the procedure and its impact on patient health.
NLHP 6.4	Demonstration of Sadyo Vamana in a patient	Workshop Students actively participate in a hands-on workshop on Sadyo Vamana under instructor supervision. They begin by assessing indications and contraindications, followed by material collection and patient preparation. In small groups, they administer emetic substances, observe vega and upavega, and identify samyak, ayoga, and atiyoga lakshana. Post-procedure, they practice Paschat Karma protocols, including dietary guidelines and recovery care. A debrief session follows, where students analyze outcomes, discuss complications, and refine their approach for real-world application.

NLHP 6.5	Demonstration of Vamana Karma in a Shwasa patient	Demonstration The instructor demonstrates the Vamana procedure by first collecting and sterilizing necessary tools. They explain the procedure to the patient and obtain informed consent. The materials for Vamana are prepared, and the procedure is demonstrated with attention to technique. The instructor observes for Samyak, Ayoga, and Atiyoga lakshana. Afterward, Paschat karma instructions for post-procedure care are provided, followed by an outcome and assessment to evaluate the procedure's success and any improvements needed.
NLHP 6.6	Demonstration of Vamana Karma in an Amlapitta patient	Same as for Shwasa
NLHP 6.7	Demonstration of Vamana Karma in a Kushta patient	Same as for Shwasa

Topic 7 Virechana Karma (LH :13 NLHT: 7 NLHP: 15)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1	Define Virechana and describe the indications and contraindications	CK	MK	KH	L&PPT	S-LAQ	F&S	II	-	LH
CO1	Describe the types of Virechana	CK	MK	KH	L&PPT	S-LAQ	F&S	II	-	LH
CO2	Apply the principles of selection of Virechana formulations - Trivrut Lehya. Avipathi Choorna, Abhayadi Modaka, Gandharveranda Taila	CAP	MK	KH	L&PPT	S-LAQ	F&S	II	-	LH
CO2, CO4	Describe the Sambhara Sangraha and Atura Pariksha	CK	MK	K	L&PPT	S-LAQ	F&S	II	-	LH
CO2, CO4	Explain Aatura Sidhata including Abhyantara Snehapana ,Vishrama Kala procedures and Virechana Yoga with Anupana and dose	CC	MK	KH	CBL,L &PPT	S-LAQ	F&S	II	-	LH

CO4	Explain the administration of Virechana Yoga and observation of Vega	CC	MK	KH	CBL,L &PPT	S-LAQ	F&S	II	-	LH
CO4, CO6	Infers the symptoms of Samyak, Ayoga, Atiyoga of Virechana with Chikitsa of Ayoga and Atiyoga	CAN	MK	KH	L&PPT ,CBL	S-LAQ	F&S	II	-	LH
CO4, CO6	Explain Paschat Karma of Virechana including assessment of Shuddhi, Samsarjana Krama and Parihara Vishaya of Virechana	CC	MK	KH	L&PPT ,CBL	S-LAQ	F&S	II	-	LH
CO4, CO6	Explain Virechana Vyapat and Chikitsa	CC	MK	KH	L&PPT ,CBL	S-LAQ	F&S	II	-	LH
CO1, CO3	Explain Virechana Karmukata	CC	MK	KH	CBL,L &PPT	S-LAQ	F&S	II	-	LH
CO3	Analyse principles of practice of Virechana Karma in Kushta	CAN	MK	KH	L&PPT ,CBL	PRN,S-LAQ	F	II	-	LH
CO3	Analyse principles of practice of Virechana Karma in Vatarakta	CAN	MK	KH	CBL,L &PPT	PRN	F	II	-	LH
CO3	Analyse principles of practice of Virechana Karma in Pakshaghata	CAN	MK	KH	CBL	PRN	F	II	-	LH
CO3	Analyse principles of practice of Virechana Karma in Prameha	CAN	MK	KH	CBL	PRN	F	II	-	LH
CO1	Explain Indications and contraindications of Virechana Karma	CC	MK	KH	L&GD	S-LAQ	F&S	II	-	NLHT7.1
CO2	Enlist and identify Virechana and Virechanopaga Dravya and describe the properties of Virechana Dravya	CK	MK	KH	L&PPT ,DG	P-ID	F&S	II	V-DG	NLHT7.2
CO3	Prepare a disease wise Virechana Purva Karma chart	CAN	MK	KH	CBL	PRN	F	II	-	NLHT7.3
CO3	Distinguish Nitya Virechana and Koshta Shodhana in patients	CC	MK	KH	CBL,TBL	COM	F	II	-	NLHT7.4

CO1, CO3	Analyze the principles of selection of formulations for Virechana	CAN	MK	KH	PBL,CBL	PRN	F	II	-	NLHT7.5
CO5	Demonstrate Purva Karma of Virechana	PSY-GUD	MK	SH	D	DOPS,OSPE	F&S	II	-	NLHP7.1
CO5	Demonstrate Pradhana Karma of Virechana	PSY-GUD	MK	SH	D	DOPS,OSPE	F&S	II	-	NLHP7.2
CO5	Demonstrate Paschat Karma of Virechana	PSY-GUD	MK	SH	D	CHK,DOPS,OSPE	F&S	II	-	NLHP7.3
CO5	Demonstrate Virechana Karma in Kushta	PSY-GUD	MK	SH	D,CBL	CBA	F&S	II	-	NLHP7.4
CO5	Demonstrate Virechana Karma in Vatarakta	PSY-GUD	MK	SH	CBL,D	CBA	F&S	II	-	NLHP7.5
CO5	Demonstrate Virechana Karma in Pakshaghata	PSY-GUD	MK	SH	CBL,D	CBA	F&S	II	-	NLHP7.6
CO5	Demonstrate Virechana Karma in Prameha	PSY-GUD	MK	SH	CBL,D	CBA	F&S	II	-	NLHP7.7

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 7.1	Indications and contraindications of Virechana Karma	Group Discussion Students are divided into small groups, each assigned topics like indications, contraindications, and factors influencing patient selection. Using clinical cases representing various doshic imbalances, groups evaluate whether Virechana is indicated and discuss the rationale behind their decisions. They explore potential risks of ignoring contraindications and the importance of patient assessment for safety and therapeutic efficacy. Key takeaways are summarized at the end to reinforce these concepts.

NLHT 7.2	Enlist and identify Virechana and Virechanopaga Dravya	Garden visit Students are divided into groups for an interactive session on Virechana and Virechanopaga Dravya. Each group focuses on classifying Virechana Dravya, Virechanopaga Dravya, and detailed study of Trivrit, including its properties and mode of action. Groups discuss the Rasa, Guna, Virya, Vipaka, and Prabhava of their assigned drugs using charts or digital tools. Students also explore Virechana and Virechanopaga drugs in the herbal garden or Dravyaguna museum. This activity enhances understanding of Ayurvedic pharmacology and its therapeutic applications.
NLHT 7.3	Preparation of a disease wise Virechana Purva Karma chart	Making of Charts Students create a comprehensive chart detailing Virechana Purva Karma, including Deepana and Pachana, Snehana (internal and external), Swedana, dietary guidelines, and psychological preparation. Each section outlines the definition, indications, formulations, procedures, and benefits of these practices. This activity enhances understanding of Ayurvedic principles and the importance of preparatory therapies for promoting health and well-being.
NLHT 7.4	Compilation on Nitya Virechana and Koshta Shodhana	Team-Based Learning Students are divided into groups to compile information on Nitya Virechana and Koshta Shodhana, focusing on their definitions, indications, formulations, procedures, and benefits. They explore formulations like Trivrut for Nitya Virechana and specific herbs for Koshta Shodhana. The discussion compares the two therapies, highlighting Nitya Virechana for routine detoxification and Koshta Shodhana for deeper cleansing, along with differences in intensity, frequency, drug choice, and outcomes.
NLHT 7.5	Analysis of selection of formulations for Virechana	PBL Students analyze the selection of Virechana drugs based on various factors, including the Dosha involved, Rogibala, Agnibala, Vaya, Vyadhi Avastha, and seasonal considerations (Rutu). They evaluate the Guna and Kalpana of each formulation to ensure compatibility with the patient's constitution. The discussion focuses on Trivrut Lehya, Avipathi Choorna, Abhayadi Modaka, and Gandharveranda Taila, tailoring each formulation to the patient’s specific constitution and health

		status for effective detoxification through Virechana therapy.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 7.1	Demonstration of Virechana Purva Karma	Kinaesthetic Learning In this hands-on demonstration of Virechana Purva Karma, students actively participate in preparing the patient for the procedure. They start by collecting all necessary tools and purgative substances. Next, they assess the patient's overall health and readiness for treatment, including evaluating Agni and Koshta to determine fitness for Virechana. Students then provide specific dietary guidelines, recommending a light diet before the procedure. Once the patient is adequately prepared, students select the appropriate Virechana Dravya based on individual needs. This interactive approach helps students engage with the steps of Virechana Purva Karma, reinforcing their understanding of the preparation required for effective detoxification.
NLHP 7.2	Demonstration of Pradhana karma of Virechana	Kinaesthetic Learning The procedure begins overnight to prepare for purgation. In the morning, students administer Virechana Yoga by giving carefully selected purgative drugs to induce controlled bowel movements. They closely monitor the patient for signs of Vega and Upavega, ensuring the process is proceeding as expected. Throughout the procedure, students make observations for Lakshana of Samyak, Ayoga, and Atiyoga, providing appropriate Chikitsa for any complications arising from Ayoga or Atiyoga. This hands-on approach allows students to engage directly in the detoxification process while prioritizing patient safety and comfort during Virechana.
NLHP 7.3	Demonstration of Paschat Karma of Virechana	Demonstration Paschat Karma instructions guide the patient on post-treatment care, emphasizing recovery. An assessment of Shuddhi evaluates the effectiveness of the purgation process. The instructor outlines dietary guidelines, recommending a light, easily digestible diet to support digestion. Pariharya Vishaya are discussed to prevent symptom recurrence and promote health. Finally, Virechana vyapat and

		Chikitsa are addressed, focusing on potential complications and their management . This approach ensures optimal care after Virechana therapy.
NLHP 7.4	Demonstration of Virechana in a Kushta patient	Demonstration Material collection gathers all necessary tools and purgative substances. Patient preparation includes assessing their condition and ensuring readiness. The material preparation involves selecting appropriate purgatives based on the patient's needs. During the procedure, the instructor administers the purgative while monitoring the patient for Samyak, Ayoga, and Atiyoga lakshana. After Virechana, Paschat karma instructions guide post-treatment care, including diet and lifestyle adjustments. Finally, a post-treatment assessment evaluates the patient's response and recovery.
NLHP 7.5	Demonstration of Virechana in a Vatarakta patient	Same as for Kushta
NLHP 7.6	Demonstration of Virechana in a Pakshaghata patient	Same as for Kushta
NLHP 7.7	Demonstration of Virechana in a Prameha patient	Same as for Kushta

Topic 8 Basti Karma (LH :18 NLHT: 10 NLHP: 25)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1	Describe the definition, synonyms and the classification of Basti according to Matra, Adhishtana and Krama	CK	MK	K	L&PPT	S-LAQ	F&S	III	-	LH
CO2	Describe the traditional and currently used instruments with their specifications for Niruha and Anuvasana Basti	CK	MK	K	L_VC,L &PPT	S-LAQ	F&S	III	-	LH
CO2	Enlist Anuvasana, Asthapana, Anuvasanopaga and Asthapanopaga Dravya	CK	DK	KH	FC	S-LAQ,QZ ,CL-PR	F	III	-	LH

CO1, CO3	Describe the indications and contraindications of Anuvasana Basti	CK	MK	KH	CBL,L &PPT ,EDU	S-LAQ	F&S	III	-	LH
CO3	Explain the Purva Karma of Anuvasana Basti including dose, diet and time of administration of Anuvasana Basti	CC	MK	KH	L_VC,L &PPT ,D	S-LAQ	F&S	III	-	LH
CO4, CO5, CO6	Explain the Pradhana Karma of Anuvasana Basti comprising of steps of administration, retention time,Apratyagamana of Sneha,Samyak Yoga, Ayoga and Atiyoga and Chikitsa of Ayoga and Atiyoga	CC	MK	KH	L&PPT ,CBL	S-LAQ	F&S	III	-	LH
CO4, CO5, CO6	Explain the Paschat karma of Anuvasana Basti comprising of diet and regimen after Anuvasana basti,Vyapat and Chikitsa	CC	MK	KH	L&PPT ,CBL,Pr BL	S-LAQ	F&S	III	-	LH
CO1	Describe the indications and contra indications of Niruha Basti	CK	MK	K	L&PPT ,CBL,P BL	S-LAQ	F&S	III	-	LH
CO4, CO5	Explain the Purva Karma of Niruha basti	CC	MK	KH	KL,L& PPT ,L_VC	S-LAQ	F&S	III	-	LH
CO4, CO5	Explain the Pradhana Karma of Niruha Basti comprising of the steps of administration, retention time, Apratyagamana of Niruha Dravya, Samyak Yoga, Ayoga and Atiyoga and Chikitsa of Ayoga and Atiyoga	CC	MK	KH	L&PPT ,L_VC	S-LAQ	F&S	III	-	LH
CO4, CO5, CO6	Explain the Paschat Karma of Niruha Basti comprising of the diet and regimen after Niruha Basti, Vyapat and Chikitsa	CC	MK	KH	CBL,PB L,L&PP T	S-LAQ	F&S	III	-	LH

CO1, CO3	Explain the mode of action of Niruha Basti and Anuvasana Basti	CC	MK	KH	L_VC,L &PPT	PRN	F&S	III	-	LH
CO2, CO3, CO6	Describe the ingredients, method of preparation and clinical application of Madhutailika Basti, Vaitarana Basti, Mustadi Yapana Basti, Ksheera Basti, Lekhana Basti, Eranda mooladi Basti, Pippalyadi Anuvasana Basti, Madhuyashtyadi Anuvasana Basti	CK	MK	SH	L&PPT ,BL	S-LAQ	F&S	III	-	LH
CO2, CO3, CO6	Analyse the principles of selection of Niruha Basti in Gridhrasi, Amavata and Anuvasana basti in Kateegraha	CAN	MK	KH	CBL,PB L	PRN	F	III	-	LH
CO2, CO7	Identify and compare traditional and conventional Basti Yantra, their components and applications	CAN	MK	SH	KL	RK,PP-Practical	F&S	III	-	NLHP8.1
CO2	Apply to calculate and customize the Matra of Niruha Basti and Anuvasana Basti according to age.	CAP	MK	KH	DIS	M-CHT	F&S	III	-	NLHT8.1
CO2	Enlist and identify Anuvasana and Anuvasanopaga, Asthapana and Asthapanopaga Dravya	CK	MK	KH	DG,L& PPT ,FV	P-ID	F&S	III	V-DG	NLHT8.2
CO3	Identify indications and contraindications of Anuvasana Basti	CK	MK	KH	PBL,CB L	PRN	F&S	III	-	NLHT8.3
CO5, CO8	Demonstrate Purva Karma of Anuvasana Basti	PSY-GUD	MK	SH	D	DOPS,OSP E	F&S	III	-	NLHP8.2
CO4, CO5	Demonstrate Pradhana Karma of Anuvasana Basti	PSY-GUD	MK	SH	D,KL	OSPE,DOP S	F&S	III	-	NLHP8.3
CO4, CO5, CO6	Demonstrate Paschat Karma of Anuvasana Basti	PSY-GUD	MK	KH	D	DOPS,CBA ,OSPE	F&S	III	-	NLHP8.4

CO3	Identify the therapeutic benefits of Niruha Basti	CK	MK	KH	CBL,DIS	PRN	F&S	III	-	NLHT8.4
CO1, CO3	Identify indications and contraindications for Niruha Basti	CK	MK	KH	FC,CBL	CL-PR	F&S	III	-	NLHT8.5
CO5, CO8	Demonstrate Purva Karma of Niruha Basti	PSY-GUD	MK	KH	DIS	OSPE,DOPS	F&S	III	-	NLHP8.5
CO4, CO5	Demonstrate Pradhana Karma of Niruha Basti	PSY-GUD	MK	SH	D	DOPS	F&S	III	-	NLHP8.6
CO4, CO5, CO6	Demonstrate Paschat Karma of Niruha Basti	PSY-GUD	MK	KH	D	OSPE,SBA, DOPS,PP-Practical	F&S	III	-	NLHP8.7
CO1, CO3	Analyse Karmukata of Niruha Basti and Anuvasana Basti	CAN	MK	KH	L_VC,TUT,L&GD	S-LAQ	F&S	III	-	NLHT8.6
CO2	Demonstrate the preparation , indications and application of Basti formulations in clinical scenario	PSY-GUD	MK	SH	D,CBL	P-PRF,DOAP	F&S	III	-	NLHP8.8
CO3	Analyse the role of Basti in Gridhrasi, Amavata and Kateegraha	CAN	MK	KH	CBL,L&GD	P-CASE,CBA	F&S	III	-	NLHT8.7
CO2, CO5	Explain the preparation of Basti Dravya	CC	MK	KH	IBL,L_VC	PRN,S-LAQ	F&S	III	-	LH
CO1	Describe the importance of Basti	CK	MK	K	L&PPT	S-LAQ	F&S	III	-	LH
CO1	Describe Niruha and Anuvasana Basti Matra according to age	CK	MK	K	L&GD	S-LAQ,VV-Viva	F&S	III	-	LH
Non Lecture Hour Theory										

S.No	Name of Activity	Description of Theory Activity
NLHT 8.1	Niruha and Anuvasana Basti Matra	Discussion In this activity, students discuss and prepare a chart outlining standard dosages for Niruha and Anuvasana Basti based on age. The facilitator introduces the importance of dosage customization in Ayurvedic practice. Students are divided into small groups to analyze age-specific dosages, calculating the appropriate Matra for each type of Basti. Each group presents their findings, explaining their reasoning and considerations. After presentations, the class engages in a discussion, allowing for questions and insights. The session concludes with a reflection on the importance of dosage customization in clinical practice.
NLHT 8.2	Anuvasana and Anuvasanopaga, Asthapana and Asthapanopaga Dravya	Field visit In this activity, students visit a herbal garden or museum to identify Anuvasana, Anuvasanopaga, Asthapana, and Asthapanopaga Dravya. A guided tour by an expert provides insights into the dravyas. Students explore and analyze the properties of each Dravya, including Rasa, Guna, Veerya, and Vipaka. They document their observations and complete a worksheet detailing each substance’s characteristics and uses. Groups then present their findings to the class, highlighting one or two (Madanaphala and Satahwa)identified Dravya and discuss their significance in Basti therapy.
NLHT 8.3	Indications and contra indications of Anuvasana Basti	Interactive learning and case discussion Students analyze the indications and contraindications of Anuvasana Basti through case discussions. The session begins with an overview of Anuvasana Basti's purpose and benefits. Students are divided into groups, each receiving a case study with patient details. Groups identify indications and contraindications based on the case, then present their findings to the class. After each presentation, a discussion facilitates further insights. The activity concludes with a reflection session on the clinical applications of Anuvasana Basti and the importance of patient assessment in Ayurvedic practice.
NLHT 8.4	Benefits of Niruha Basti	Case Based Learning In this activity, students discuss cases who have undergone Basti therapy. Each group reviews symptoms before and after treatment, assessing changes and therapeutic benefits. The activity

		promotes critical thinking as students identify patterns and outcomes. The instructor summarizes key findings, addresses common themes, and encourages deeper analysis of Basti's mechanisms and individualized treatment plans.
NLHT 8.5	Indications and contra indications of Niruha Basti	Case Based Learning In this Niruha Basti activity, students engage in case discussions to analyze its indications and contraindications. The instructor explains Niruha Basti's benefits for detoxification and treating Vata-related disorders. Students are divided into small groups, each reviewing a case study card detailing patient symptoms and health history. They identify indications and contraindications for Niruha Basti based on the case. After discussions, each group presents their case, followed by a class discussion to address questions and insights. The session concludes with a reflection on the clinical applications of Niruha Basti and the importance of thorough patient assessment. This activity promotes critical thinking, teamwork, and practical knowledge.
NLHT 8.6	Niruha Basti and Anuvasana Basti Karmukata	Group Discussion The session begins with a brief lecture on Anuvasana Basti and Niruha Basti , explaining their roles in detoxification and nourishment. Students then work in groups to analyze how each type functions and its therapeutic effects. A class discussion follows, comparing their modes of action and addressing practical challenges. The session concludes with a summary of key insights, reinforcing the clinical relevance of Basti therapy in Panchakarma
NLHT 8.7	Principles of practice of Basti	Discussion Students analyze Basti therapy for Gridhrasi, Amavata, and Kateegraha . After a brief discussion on each condition’s pathophysiology, groups explore suitable Basti formulations. Each group presents their findings, explaining how formulation selection aligns with the Sameekshya Bhava.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**

NLHP 8.1	Demonstration of Basti Yantra	Kinaesthetic learning This demonstration introduces students to the Basti Yantra, covering both traditional and modern versions. Students learn about its components and applications. The activity involves preparing materials, filling the Basti Putaka, lubricating the nozzle, positioning the mannequin, inserting the nozzle, administering the liquid, and ensuring proper aftercare. Students engage with questions throughout to deepen their understanding. The session concludes by emphasizing the evolution of Basti Yantra and its significance in both Ayurvedic therapies and modern healthcare.
NLHP 8.2	Purva Karma of Anuvasana Basti	Demonstration The demonstration of Purva Karma for Anuvasana Basti begins with Sambhara Sangraha. Atura Pariksha is conducted to assess the patient's fitness, followed by an explanation of the Anuvasana Basti kala(time of administration). Abhyanga and Swedana are performed to prepare the body, enhancing absorption. The dose fixation is calculated based on individual needs, and dietary recommendations are provided to optimize the therapeutic effects before administering the Basti.
NLHP 8.3	Pradhana Karma of Anuvasana Basti	Kinaesthetic learning In this activity, students practice administering Anuvasana Basti on a model or simulated patient. They observe and note the patient's response, including any Vega and monitor the evacuation of the Basti Dravya. Students learn to identify Ayoga, Samyakyoga, and Atiyoga Lakshana. They also track the Anuvasana Pratyagamana Kala and apply interventions for Apratyagamana, Ayoga, or Atiyoga as needed. This hands-on experience helps students integrate theoretical knowledge with practical skills for effective Anuvasana Basti administration.
NLHP 8.4	Paschat Karma of Anuvasana Basti	Demonstration In the Paschat Karma demonstration for Anuvasana Basti, the focus is on post-treatment care and dietary recommendations. After treatment, the patient’s buttocks are lightly patted, and they are encouraged to relax in a supine position with a raised foot end and a pillow under the head for comfort. Patients remain in this position for a specified duration and are advised to avoid activities or foods that could hinder recovery. The instructor discusses potential complications and management strategies.

		This demonstration highlights the importance of Paschat Karma in optimizing the therapeutic benefits of Anuvasana Basti.
NLHP 8.5	Purva Karma of Niruha Basti	Demonstration The instructor guides students through the preparatory steps for Niruha . The session starts with a discussion on Sambhara Sangraha, covering required materials, including Kashaya, Kalka and food after Basti. Atura Pariksha is emphasized to assess the patient's fitness. Students learn about Niruha Basti Kala for optimal timing and the preparation of the patient with Abhyanga and Swedana. Dietary considerations highlight the need for an empty stomach. Dose Fixation is covered to determine the correct volume of Basti dravya. Finally, students learn about Basti Samyojana Vidhi and how to prepare the Basti Dravya. This demonstration ensures students understand the Purva Karma process in Niruha Basti.
NLHP 8.6	Pradhana Karma of Niruha Basti	Kinaesthetic learning Students actively participate in the positioning of the patient and administration of the Basti using sterile Basti Yantra. They monitor the Basti Daata Dosha , ensure proper dosage, observe the evacuation process for signs of Vega, and note the Niruha Pratyagamana Kala. In case of Apratyagamana, students apply necessary measures for evacuation of Basti Dravya. They also assess Ayoga, Samyakyoga, and Atiyoga Lakshana, practicing interventions based on the therapy's effectiveness. This hands-on approach ensures students understand the key steps in performing Niruha Basti safely and effectively.
NLHP 8.7	Paschat Karma of Niruha Basti	Group Discussion Students engage in group discussions on post-treatment care, diet, and complications of Niruha. Groups explore: • Dietary Guidelines: Emphasizing light, digestible foods. • Parihara Vishaya: Avoiding strenuous activities, cold exposure, and incompatible foods.

		• Vyapat & Chikitsa: Identifying complications and their management.
NLHP 8.8	Clinical application of Basti formulations	Case Based Learning Students analyze clinical cases of Gridhrasi, Amavata, and Kateegraha to determine the appropriate Basti therapy. Each group receives a patient scenario, assesses Dosha involvement, and selects a suitable Basti formulation. They justify their choices based on pathophysiology, formulation properties, and expected therapeutic effects. After discussion, groups present their treatment plans, including preparation, administration, and post-care protocols. This interactive approach enhances clinical reasoning and practical application of Basti therapy. The discussion should focus on the following basti formulations • Madhutailika Basti • Vaitarana Basti • Mustadi Yapana Basti • Ksheera Basti • Lekhana Basti • Eranda mooladi Basti • Pippalyadi Anuvasana Basti • Madhuyashtyadi Anuvasana Basti

Topic 9 Nasya Karma (LH :10 NLHT: 6 NLHP: 12)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1	Define Nasya Karma and describe the Indications, contraindications and classification of Nasya based on Karma	CK	MK	K	L&PPT ,REC	S-LAQ,M-CHT	F&S	III	-	LH
CO2	Enlist Shirovirechana Gana and describe currently practiced Shirovirechana Dravya	CK	NK	K	L&PPT ,D	S-LAQ,QZ	F	III	V-DG	LH
CO2, CO4, CO5	Explain Purva Karma of Nasya comprising of Sambhara Sangraha, Atura Pariksha, Oushadha Nirnaya, Nasya Kala and Atura sidhata	CC	MK	KH	L&PPT	S-LAQ	F&S	III	-	LH

CO2, CO4, CO5	Infer Pradhana Karma of Nasya including administration of Nasya Dravya, Samyakyoga, Ayoga and Atiyoga Lakshana and Chikitsa	CC	MK	KH	L&PPT ,REC	S-LAQ	F&S	III	-	LH
CO4	Explain Paschat Karma of Nasya comprising of Padatala Hastadi Mardana, Dhumapana,Kavala, Diet, Parihara Vishaya, Nasya Vyapat and Chikitsa	CC	MK	KH	REC,L &PPT	S-LAQ	F&S	III	-	LH
CO2, CO3	Distinguish the ingredients and clinical application of Nasya formulations - Anutaila, Ksheerabala Taila, Karpasastyadi Taila, Shadbindu Taila, Kumkumadi Taila, Brahmi Ghrita, Rasnadi Churna and Tulasi Swarasa	CC	MK	KH	L&GD, L&PPT	S-LAQ	F&S	III	-	LH
CO1, CO3	Comprehend the mode of action of Nasya Karma	CC	MK	KH	L_VC,L &PPT	PRN,S-LAQ	F&S	III	-	LH
CO1, CO3	Explain and analyze the principles and practice of Nasya Karma in Pakshaghata, Apabahuka, Manyastambha and Ardita.	CAN	MK	KH	L&GD, PBL,CBL,L&PPT	S-LAQ,PRN	F&S	III	-	LH
CO2	Enlist and identify Shirovirechana Gana Dravya and describe their properties	CAP	MK	KH	DG,FV, L&PPT	P-ID	F&S	III	V-DG	NLHT9.1
CO3	Prepare Chart for Purva Karma of Nasya	PSY-GUD	MK	SH	LS,TBL ,DIS	CL-PR,PRN,M-CHT	F	III	-	NLHT9.2
CO4	Illustrate Pradhana Karma of Nasya	CAN	MK	KH	L&GD, FC,PER	PRN,CL-PR	F	III	-	NLHT9.3
CO5	Demonstrate Purva Karma of Nasya	PSY-GUD	MK	SH	D-M,D, KL,PT	OSPE,DOPS	F&S	III	-	NLHP9.1
CO5	Demonstrate Pradhana Karma of Nasya	PSY-GUD	MK	SH	KL,D,PT,SIM	P-RP,OSPE ,DOPS	F&S	III	-	NLHP9.2

CO5	Demonstrate Paschat Karma of Nasya	PSY-GUD	MK	SH	D,KL	DOPS,OSPE,P-PRF	F&S	III	-	NLHP9.3
CO1, CO3	Analyze the principles of selection of formulations for Nasya	CAN	MK	KH	PBL,LS,CBL	PRN,SBA	F&S	III	-	NLHP9.4
CO5	Demonstrate Nasya Karma in Pakshaghata	PSY-GUD	MK	SH	CBL	CBA	F&S	III	-	NLHP9.5
CO5	Demonstrate Nasya Karma in Apabahuka and Manyastambha,	PSY-GUD	MK	SH	D,CBL	CBA	F&S	III	-	NLHP9.6
CO5	Demonstrate Nasya karma in Ardita.	PSY-GUD	MK	SH	CBL,D	CBA	F&S	III	-	NLHP9.7
CO1, CO3	Discuss the pharmacodynamics of Nasya Karma	CC	DK	KH	LS,PER,DIS	O-QZ,T-OBT,M-POS	F	III	-	NLHT9.4

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 9.1	Identification of Shirovirechana Gana	Field visit Students are divided into teams to explore the classifications of Shirovirechana Gana. Each group analyzes assigned formulations, discussing attributes like Rasa, Guna, Virya, Vipaka, and Prabhava. Using charts or digital tools, they organize their findings for clarity. They also observe Shirovirechana and Shirovirechanopaga drugs in the herbal garden or Dravyaguna museum to enhance practical knowledge.
NLHT 9.2	Preparation of Chart for Purva Karma of Nasya	Team Based Learning Students are divided into groups of 2-4 to create a comprehensive checklist for the Purva Karma phase of Nasya. One group prepares a checklist for Sambhara Sangraha, detailing necessary materials like medicated oils, tools, and supportive items. Another group creates a checklist for Patient Preparation, covering hygiene, positioning, and obtaining consent. This activity enhances understanding of Nasya's

		preparatory processes while fostering teamwork and critical thinking skills.
NLHT 9.3	Discussion on Pradhana Karma of Nasya	Class presentation In this class presentation activity on the Pradhana Karma of Nasya, students are divided into groups, with one student from each group responsible for presenting. Each group focuses on different aspects of the Pradhana Karma phase, including techniques for instilling medication, patient positioning, and therapeutic benefits. After the presentations, the instructor summarizes key points, reinforcing Nasya's significance in Ayurvedic practice and its role in treating head and neck conditions. This collaborative approach enhances understanding and encourages student engagement.
NLHT 9.4	Nasya Karmukata	Discussion Students are introduced to the importance of Nasya Karma. They then break into small groups to discuss how nasal drugs affect doshas by engaging olfactory receptors and influencing brain functions, focusing on conditions above the clavicle like headaches and sinus issues. Each group summarizes key points, emphasizing insights into Nasya Karma's therapeutic potential and its clinical implications. This activity deepens understanding of Nasya Karma in Ayurvedic medicine.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 9.1	Demonstration of Purva Karma of Nasya	Demonstration The instructor guides students through the essential preparations for Nasya Karma, demonstrating on a volunteer or mannequin. The process begins with Sambhara Sangraha, collecting all necessary materials, including medicated oils and tools. The instructor emphasizes assessing the patient's fitness for Nasya Karma and preparing the patient by performing Mukha Abhyanga and Swedana to enhance therapeutic effectiveness. Students are also instructed on selecting appropriate Nasya Oushadha Dravya based on the patient's Dosha and health conditions. This approach ensures that students

		understand the critical preparatory steps for a successful Nasya therapy session.
NLHP 9.2	Demonstration of Pradhana Karma of Nasya in a patient	Demonstration The instructor guides students through the essential steps of Nasya Karma, focusing on the Pradhana Karma phase. The session begins with proper patient positioning in a supine position with the head tilted back and limbs apart. The instructor demonstrates the administration of Nasya Dravya, instilling it in a continuous stream into each nostril while closing the other. Students learn effective management techniques, including instructing the patient to avoid movements, speech, or disturbances. The instructor covers Samyak, Ayoga, and Atiyoga Lakshana, helping students recognize signs of effective treatment and complications. Strategies for managing Ayoga and Atiyoga are also discussed, equipping students with practical skills for Nasya Karma in clinical practice
NLHP 9.3	Demonstration of Paschat Karma of Nasya	Demonstration The instructor demonstrates the Paschat Karma phase of Nasya in a volunteer or Mannequin . After the administration of Nasya Dravya, gentle massage of head, cheeks, and neck to enhance circulation and relieve tension are shown. Additionally, practices such as Dhumapana and Kavala are demonstrated. Dietary restrictions and lifestyle modifications to be advised are also discussed. This comprehensive approach in Paschat Karma is crucial for optimizing the outcomes of Nasya therapy.
NLHP 9.4	Principles of selection of formulations for Nasya	PBL / Discussion Students analyze the selection criteria for Nasya Karma formulations, focusing on factors like Dosha, Rogibala, Vaidhi Avastha, Vayah, and Agnibala, as well as the Guna and Kalpana of medicinal substances. The session covers adjusting Matra based on patient characteristics and health status. Students examine specific formulations such as Anu Taila, Ksheerabala Taila, Karpasastyadi Taila, Shadbindu Taila, Kumkumadi Taila, Brahmi Ghrita, Rasnadi Churna, and Tulasi Swarasa. The discussion enhances their understanding of personalized Ayurvedic treatments and clinical application.
NLHP 9.5	Demonstration of Nasya in a Pakshaghata patient	Demonstration The instructor outlines a stepwise procedure starting with material collection, including medicated oils

		or powders, cotton pads, and towels. The patient is positioned comfortably, supine with the head tilted back, and informed consent is obtained. The Nasya dravya is warmed to a lukewarm temperature. During application, drops are administered into each nostril, with the patient instructed to inhale gently. In the Paschat Karma phase, post-care instructions are given.
NLHP 9.6	Demonstration of Nasya in Apabahuka and Manyastambha,	Bedside case discussion Same as for Pakshaghata and Ardita
NLHP 9.7	Demonstration of Nasya in an Ardita patient	Bed side case discussion The instructor discusses a case of Ardita at the bedside. First, the patient's condition is assessed, focusing on symptoms and the underlying Samprapti. The discussion then covers the selection of appropriate Nasya, including suitable Nasya dravya and Matra. Participants evaluate which formulations best address the dosha imbalances and symptoms. This approach enhances understanding of Nasya Karma's clinical application, helping formulate effective treatment strategies based on Ayurvedic principles.

Topic 10 Emergency management and Research updates in Panchakarma and Upakarma (LH :2 NLHT: 2 NLHP: 5)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO6, CO7	Describe common causes and symptoms of Water and Electrolyte imbalance , Hematemesis, Epistaxis and their management.	CK	DK	K	L&PPT	S-LAQ	F&S	III	-	LH
CO7	Explain and Integrate the recent advancements in Panchakarma	CC	DK	KH	L&PPT	QZ ,DEB	F&S	III	-	LH
CO7	Identify the signs and symptoms of Water and Electrolyte imbalance, Haematemesis, and Epistaxis, assess the severity, and select appropriate emergency interventions	CAN	NK	KH	GBL,CBL,RP	SBA, C-VC,QZ	F	III	H-SH	NLHT10.1

CO7	Evaluate recent advancements and scientific evidence supporting Snehana, Swedana and Upakarma	CE	DK	KH	LS,IBL, ML,DIS	M-CHT,CO M,DEB	S	III	-	NLHP10.1
CO3, CO7	Evaluate recent advancements and scientific evidence supporting Vamana Karma	CE	DK	KH	W,LS,D IS	CL-PR,DEB	F	III	-	NLHP10.2
CO3, CO7	Evaluate recent advancements and scientific evidence supporting Virechana Karma	CE	DK	KH	GBL,PL ,LS,PE R,DIS	DEB,CL-PR	S	III	-	NLHP10.3
CO3, CO7	Evaluate recent advancements and scientific evidence supporting Basti Karma	CE	DK	KH	GBL,E DU,TB L,LS	QZ ,CL-PR,DEB	S	III	-	NLHP10.4
CO3, CO7	Evaluate recent advancements and scientific evidence supporting Nasya Karma	CE	DK	KH	BL,LS, PL,DIS	PRN,DEB, M-POS	S	III	-	NLHP10.5

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 10.1	Emergency Management of Water and Electrolyte imbalance,Haematemesis and Epistaxis	Diagnose and Treat Students identify and manage signs and symptoms of water and electrolyte imbalances, hematemesis, and epistaxis. Each participant matches symptoms from cards to corresponding imbalances and selects appropriate management strategies from provided cards. This hands-on approach improves diagnostic skills and equips students with practical treatment strategies for these critical conditions.

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 10.1	Review of research updates on Snehana, Swedana and Upakarma	Panchakarma Research Review Participants analyze recent research on Snehana, Swedana and Upakrma in small groups, each assigned a specific paper or article. Groups summarize key findings and discuss their impact on

		clinical practice or future research. This collaborative effort deepens their understanding of Panchakarma, improving their ability to critically evaluate research and apply insights to enhance Snehana, Swedana and Upakarma in clinical settings.
NLHP 10.2	Review of research updates on Vamana Karma	Group Discussion Participants engage in a comprehensive analysis of recent research updates related to Vamana Karma. Divided into small groups, each team is assigned a specific research paper or article that focuses on various aspects of Vamana Karma. Groups review their assigned material, summarize key findings, and discuss how these insights influence clinical practice or guide future research initiatives.
NLHP 10.3	Review of research updates on Virechana Karma	Game based learning Students are divided into teams and assigned a research paper on topics like efficacy, safety, or clinical applications. The game has three rounds: Abstract Scramble, where teams reorder a mixed-up research abstract; Fact vs. Fiction, where they defend or challenge study claims; and Peer Review Panel, where teams act as journal reviewers, identifying flaws and suggesting improvements. Points are awarded for analytical accuracy. This interactive format promotes active learning, teamwork, and real-world research evaluation skills.
NLHP 10.4	Review of research updates on Basti Karma	Library session Students engage in self-directed learning by exploring Ayurvedic texts like Charaka Samhita, Sushruta Samhita, and Ashtanga Hridaya. They focus on the etymology, types, indications, contraindications, and procedural aspects of Basti Karma, while also reviewing modern research. Activities such as guided reading, group discussions, literature reviews, and case analysis enhance engagement. Faculty guide students with references and prompts, encouraging critical evaluation of therapeutic mechanisms, formulations, and clinical applications, fostering independent research and evidence-based practice.
NLHP 10.5	Review of Research updates on Nasya Karma	Peer learning Students analyze recent studies in groups, focusing on aspects like pharmacology, clinical efficacy,

		and safety. They engage in discussions using methods such as journal clubs, jigsaw learning, fishbowl discussions, and case-based approaches to critically evaluate research and compare Ayurvedic concepts with modern findings. Structured frameworks like PICO and CONSORT guide their analysis, while peer feedback and group reflections enhance understanding. Through application tasks and documentation, students synthesize key insights, build a research repository, and strengthen their ability to integrate evidence-based knowledge with traditional wisdom

Table 4 : NLHT Activity

(*Refer table 3 of similar activity number)

Activity No*	CO No	Activity details
1.1	CO1,CO3	Utility of Raktamokshana in diseases
1.2	CO1,CO3	Project work on Rutu Shodhana
2.1	CO1	Importance of Snehana Karma
2.2	CO2	Selection of Bahya Sneha
2.3	CO2	Selection of Abhyantara Sneha
2.4	CO7	Fat metabolism
2.5	CO7	Snehana Pharmacodynamics
2.6	CO3,CO4	Udwartana and its benefits.
2.7	CO3,CO4	Diet and Parihara Vishaya during Snehapana
2.8	CO3,CO4	Discussion on Accha sneha and Pravicharana sneha.
2.9	CO3,CO4,CO5	Abhyanga in Swastha and Atura
2.10	CO3,CO4,CO5	Massaging Techniques
2.11	CO2,CO3,CO5	Clinical application of Murdhni Taila
3.1	CO4,CO7	Mechanism of sweating
3.2	CO1,CO3	Indications of Sweda Karma
3.3	CO1,CO3	Contraindications of Sweda Karma
4.1	CO1	Interactive learning on Sankara Sweda

4.2	CO1	Compilation of drugs used for Thalam and Thalapothichil
4.3	CO1	Interactive learning on regional variations in practice of Pizhichil
4.4	CO1,CO3	Utilty of Thalapothichil
4.5	CO1,CO4	Interactive discussion on the procedure of Takradhara
4.6	CO1,CO3	Variations in practice of Takradhara
4.7	CO1,CO3	Clinical utility of Dhanyamla
5.1	CO1,CO7	Discussion on Integration of Physiotherapy and Ayurvedic approaches
6.1	CO1,CO3	Indications and contraindications of Vamana Karma
6.2	CO2	Identification of Vamana and Vamanopaga Dravya
6.3	CO3	Preparation of disease wise Vamana Purva Karma chart
6.4	CO4	Interactive discussion on Paschat Karma
6.5	CO3	Peer learning on the concept of Sadyo Vamana
6.6	CO4,CO8	Roleplay on patient communication for Vamana Karma
7.1	CO1	Indications and contraindications of Virechana Karma
7.2	CO3	Preparation of a disease wise Virechana Purva Karma chart
7.3	CO2	Enlist and identify Virechana and Virechanopaga Dravya
7.4	CO3	Compilation on Nitya Virechana and Koshta Shodhana
7.5	CO1,CO3	Analysis of selection of formulations for Virechana
8.1	CO3	Benefits of Niruha Basti

8.2	CO2	Niruha and Anuvasana Basti Matra
8.3	CO1,CO3	Niruha Basti and Anuvasana Basti Karmukata
8.4	CO2	Anuvasana and Anuvasanopaga, Asthapana and Asthapanopaga Dravya
8.5	CO3	Indications and contra indications of Anuvasana Basti
8.6	CO1,CO3	Indications and contra indications of Niruha Basti
8.7	CO3	Principles of practice of Basti
9.1	CO2	Identification of Shirovirechana Gana
9.2	CO3	Preparation of Chart for Purva Karma of Nasya
9.3	CO4	Discussion on Pradhana Karma of Nasya
9.4	CO1,CO3	Nasya Karmukata
10.1	CO7	Emergency Management of Water and Electrolyte imbalance,Haematemesis and Epistaxis

Table 5 : List of Practicals

(*Refer table 3 of similar activity number)

Practical No*	CO No	Practical Activity details
1.1	CO1,CO3	Koshta and Agni Pariksha in Panchakarma
1.2	CO1	Panchakarma theatre requirements
1.3	CO1,CO7	Advancement in instrumentation in Panchakarma and Upakarma
2.1	CO3,CO4,CO5	Procedure of Udwartana.
2.2	CO3,CO4,CO5	Procedure of Udgharshana and Utsadana.
2.3	CO3,CO4	Shodhanartha Snehapana in Kushta and Vatarakta
2.4	CO3,CO4	Shodhanartha Snehapana procedure.
2.5	CO3,CO4	Shamanartha Snehapana procedure.
2.6	CO3,CO4	Shamanartha Snehapana in Kushta and Vatarakta.
2.7	CO3,CO4	Sneha Vyapat and Chikitsa.
2.8	CO3,CO4	Brumhana Snehapana and Sadya Snehana
2.9	CO3,CO4,CO5	Shiro Abhyanga Procedure
2.10	CO3,CO4,CO5	Procedure of Shirodhara with Taila.
2.11	CO3,CO4	Shiropichu demonstration.
2.12	CO3,CO4	Procedure of Abhyanga
2.13	CO3,CO4	Shirobasti demonstration
2.14	CO3,CO4	Sthanika Basti demonstration.

3.1	CO3,CO4,CO5	Nadi Sweda procedure.
3.2	CO3,CO4,CO5	Tapa Sweda procedure.
3.3	CO3,CO4,CO5	Upanaha Sweda procedure
3.4	CO3,CO4,CO5	Parisheka Sweda procedure.
3.5	CO3,CO4,CO5	Avagaha Sweda procedure.
3.6	CO3,CO4,CO5	Clinical application of Sweda
4.1	CO3	Procedure of Sankara Sweda
4.2	CO3	Demonstration of procedure of Ksheeradhooma
4.3	CO3	Demonstration of the procedure of Pizhichil
4.4	CO3	Demonstration of Dhanyamladhara procedure
4.5	CO3,CO5	Demonstration of Takradhara procedure
4.6	CO3,CO5	Demonstration of Thalam and Thalapothichil procedure
4.7	CO3,CO4,CO5	Demonstration of Annalepa procedure
5.1	CO7	Procedure of Superficial heating modalities and Deep Heating Modalities.
5.2	CO7	Procedure of Isometric and Isotonic Exercise
5.3	CO7	Procedure of Interferential Therapy (IFT) , Transcutaneous Electrical Nerve Stimulation (TENS) and Muscle Stimulation Therapy (MST)
5.4	CO7	Procedure of Manual therapy
6.1	CO5	Demonstration of Vamana Purva Karma in a patient
6.2	CO5	Pradhana Karma of Vamana in a patient
6.3	CO5	Demonstration of Paschat Karma of Vamana

6.4	CO5	Demonstration of Sadyo Vamana in a patient
6.5	CO5	Demonstration of Vamana Karma in a Shwasa patient
6.6	CO5	Demonstration of Vamana Karma in an Amlapitta patient
6.7	CO5	Demonstration of Vamana Karma in a Kushta patient
7.1	CO5	Demonstration of Paschat Karma of Virechana
7.2	CO5	Demonstration of Virechana in a Vatarakta patient
7.3	CO5	Demonstration of Virechana in a Pakshaghata patient
7.4	CO5	Demonstration of Virechana Purva Karma
7.5	CO5	Demonstration of Pradhana karma of Virechana
7.6	CO5	Demonstration of Virechana in a Prameha patient
7.7	CO5	Demonstration of Virechana in a Kushta patient
8.1	CO2,CO7	Demonstration of Basti Yantra
8.2	CO5,CO8	Purva Karma of Anuvasana Basti
8.3	CO4,CO5	Pradhana Karma of Anuvasana Basti
8.4	CO4,CO5,CO6	Paschat Karma of Anuvasana Basti
8.5	CO5,CO8	Purva Karma of Niruha Basti
8.6	CO4,CO5	Pradhana Karma of Niruha Basti
8.7	CO4,CO5,CO6	Paschat Karma of Niruha Basti
8.8	CO2	Clinical application of Basti formulations
9.1	CO5	Demonstration of Paschat Karma of Nasya

9.2	CO5	Demonstration of Nasya in a Pakshaghata patient
9.3	CO5	Demonstration of Nasya in Apabahuka and Manyastambha,
9.4	CO5	Demonstration of Purva Karma of Nasya
9.5	CO5	Demonstration of Nasya in an Ardita patient
9.6	CO5	Demonstration of Pradhana Karma of Nasya in a patient
9.7	CO1,CO3	Principles of selection of formulations for Nasya
10.1	CO7	Review of research updates on Snehana, Swedana and Upakarma
10.2	CO3,CO7	Review of research updates on Vamana Karma
10.3	CO3,CO7	Review of research updates on Virechana Karma
10.4	CO3,CO7	Review of research updates on Basti Karma
10.5	CO3,CO7	Review of Research updates on Nasya Karma

Table 6 : Assessment Summary: Assessment is subdivided in A to H points

6 A : Number of Papers and Marks Distribution

Subject Code	Papers	Theory	Practical/Clinical Assessment (200)					Grand Total
			Practical	Viva	Elective	IA	Sub Total	
AyUG-PK	1	100	100	70	-	30	200	300

6 B : Scheme of Assessment (Formative and Summative)

PROFESSIONAL COURSE	FORMATIVE ASSESSMENT			SUMMATIVE ASSESSMENT
	First Term (1-6 Months)	Second Term (7-12 Months)	Third Term (13-18 Months)	
Third	3 PA & First TT	3 PA & Second TT	3 PA	**UE****

PA: Periodical Assessment; **TT:** Term Test; **UE:** University Examinations; **NA:** Not Applicable.
******University Examination shall be on entire syllabus

6 C : Calculation Method for Internal assessment Marks

TERM	PERIODICAL ASSESSMENT*					TERM TEST**	TERM ASSESSMENT	
	A 2	B	C	D	E	F	G	H
	1 (15 Marks)	2 (15 Marks)	3 (15 Marks)	Average (A+B+C/3)	Converted to 30 Marks (D/15*30)	Term Test (Marks converted to 30)	Sub Total _/60 Marks	Term Assessment (…./30)
FIRST							E+F	(E+F)/2
SECOND							E+F	(E+F)/2
THIRD						NIL		E
Final IA	Average of Three Term Assessment Marks as Shown in 'H' Column.							
	Maximum Marks in Parentheses *Select an Evaluation Method which is appropriate for the objectives of Topics from the Table 6 D for Periodic assessment. Conduct 15 marks assessment and enter marks in A, B, and C. ** Conduct Theory (100 Marks)(MCQ(20*1 Marks), SAQ(8*5), LAQ(4*10)) and Practical (100 Marks) Then convert to 30 marks.							

6 D : Evaluation Methods for Periodical Assessment

S. No.	Evaluation Methods
1.	Practical / Clinical Performance
2.	Viva Voce, MCQs, MEQ (Modified Essay Questions/Structured Questions)
3.	Open Book Test (Problem Based)
4.	Summary Writing (Research Papers/ Samhitas)
5.	Class Presentations; Work Book Maintenance
6.	Problem Based Assignment
7.	Objective Structured Clinical Examination (OSCE), Objective Structured Practical Examination (OPSE), Mini Clinical Evaluation Exercise (Mini-CEX), Direct Observation of Procedures (DOP), Case Based Discussion (CBD)
8.	Extra-curricular Activities, (Social Work, Public Awareness, Surveillance Activities, Sports or Other Activities which may be decided by the department).
9.	Small Project
10.	Activities Indicated in Table 3 - Column G3 as per Indicated I, II or III term in column I3.

Topics for Periodic Assessments

PA	Paper 1
PA 1	Topic 1.1 to 1.6
PA 2	Topic 2.1 to 2.6
PA 3	Topic 3.1 to 3.6
Term Test 1	Entire Syllabus of Term 1
PA 4	Topic 4.1 to 4.7
PA 5	Topic 5.1 to 6.5
PA 6	Topic 6.6 to 7.7
Term Test 2	Entire Syllabus of Term 2
PA 7	Topic 8.1 to 8.12
PA 8	Topic 8.13 to 9.8
PA 9	Topic 8.1 to 10.2

6 E : Question Paper Pattern

III PROFESSIONAL BAMS EXAMINATIONS
AyUG-PK
PAPER-I
Time: 3 Hours Maximum Marks: 100
INSTRUCTIONS: All questions compulsory

		Number of Questions	**Marks per question**	**Total Marks**
Q 1	MULTIPLE CHOICE QUESTIONS (MCQ)	20	1	20
Q 2	SHORT ANSWER QUESTIONS (SAQ)	8	5	40
Q 3	LONG ANSWER QUESTIONS (LAQ)	4	10	40
				100

6 F : Distribution of theory examination

Paper 1 (Panchakarma and Upakarma)					
Sr. No	**A List of Topics**	**B Marks**	**MCQ**	**SAQ**	**LAQ**
1	**Fundamentals of Panchakarma**	8	Yes	Yes	No
2	**Snehana Karma**	12	Yes	Yes	Yes
3	**Swedana Karma**	12	Yes	Yes	Yes
4	**Special Procedures: Sankara Sweda, Ksheeradhooma, Pizhichil, Dhanyamladhara, Takradhara, Thalam and Thalapothichil and Annalepa**	10	Yes	Yes	Yes
5	**Physiotherapy**	5	No	Yes	No
6	**Vamana Karma**	10	Yes	Yes	Yes
7	**Virechana Karma**	10	Yes	Yes	Yes
8	**Basti Karma**	18	Yes	Yes	Yes
9	**Nasya Karma**	10	Yes	Yes	Yes
10	**Emergency management and Research updates in Panchakarma and Upakarma**	5	No	Yes	No
Total Marks		**100**			

6 G : Instructions for UG Paper Setting & Blue print

1. All questions shall be compulsory.
2. Questions shall be drawn based on Table 6F, which provides the topic name, types of questions (MCQ(Multiple Choice Question), SAQ(Short Answer Question), LAQ(Long Answer Question)).
3. The marks assigned in Table 6F for each topic/group of topics shall be considered as the maximum allowable marks for that topic/group of topics.
4. Ensure that the total marks allocated per topic/group of topics do not exceed the limits specified in Table 6F.
5. Refer to Table 6F before setting the questions. Questions shall be framed only from topics where the type is marked as “YES”, and avoided if marked as “NO”.
6. Each 100-mark question paper shall contain:
   - 20 MCQs
   - 8 SAQs
   - 4 LAQs

7. MCQs:
   - Majority shall be drawn from the Must to Know part of the syllabus.
   - Questions from the Desirable to Know part of syllabus shall not exceed 3.
   - Questions from the Nice to Know part of syllabus shall not exceed 2.

8. SAQs:
   - Majority shall be drawn from the Must to Know part of the syllabus.
   - Questions from the Desirable to Know part of syllabus shall not exceed 1.
   - No questions shall be drawn from the Nice to Know part of syllabus.
   - SAQs shall assess understanding, application, and analysis, rather than simple recall.

9. LAQs:
   - All LAQs shall be drawn exclusively from the Must to Know part of the syllabus.
   - No questions shall be taken from the Desirable to Know or Nice to Know part of the syllabus.
   - Number of LAQs should not exceed one per topic unless maximum marks exceed 20 for the topic.

10. Long Answer Questions shall be structured to assess higher cognitive abilities, such as application, analysis, and synthesis.
11. Follow the guidelines in User Manual III for framing MCQs, SAQs, and LAQs.

6 H : Distribution of Practical Exam

S.No	Heads	Marks
1	Short case with Panchakarma protocol writing	30
2	Procedure skill assessment (4 procedures on mannequins or simulated patients in OSPE format)	40
3	Viva (2 examiners: 35marks/each examiner)	70
4	Logbook (Activity record)	10
5	Practical/Clinical Record	20
6	Internal Assesment	30
Total Marks		**200**

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Abbreviations

Domain		T L Method		Level		Assessment		Integration	
CK	Cognitive/Knowledge	L	Lecture	K	Know	T-CS	Theory case study	V-RS	V RS
CC	Cognitive/Comprehension	L&PPT	Lecture with PowerPoint presentation	KH	Knows how	T-OBT	Theory open book test	V-KS	V KS
CAP	Cognitive/Application	L&GD	Lecture & Group Discussion	SH	Shows how	P-VIVA	Practical Viva	H-KC	H KC
CAN	Cognitive/Analysis	L_VC	Lecture with Video clips	D	Does	P-REC	Practical Recitation	H-SH	H SH
CS	Cognitive/Synthesis	REC	Recitation			P-EXAM	Practical exam	H-PK	H PK
CE	Cognitive/Evaluation	SY	Symposium			PRN	Presentation	H-SHL	H SHL
PSY-SET	Psychomotor/Set	TUT	Tutorial			P-PRF	Practical Performance	H-SP	H SP
PSY-GUD	Psychomotor/Guided response	DIS	Discussions			P-SUR	Practical Survey	H-KB	H-KB
PSY-MEC	Psychomotor/Mechanism	BS	Brainstorming			P-EN	Practical enact	H-Samhita	H-Samhita
PSY-ADT	Psychomotor Adaptation	IBL	Inquiry-Based Learning			P-RP	Practical Role play	V-DG	V DG
PSY-ORG	Psychomotor/Origination	PBL	Problem-Based Learning			P-MOD	Practical Model	V-RN	V RN
AFT-REC	Affective/ Receiving	CBL	Case-Based Learning			P-POS	Practical Poster	V-RS	V RS
AFT-RES	Affective/Responding	PrBL	Project-Based Learning			P-CASE	Practical Case taking	V-AT	V AT
AFT-VAL	Affective/Valuing	TBL	Team-Based Learning			P-ID	Practical identification	V-SW	V SW
AFT-SET	Affective/Organization	TPW	Team Project Work			P-PS	Practical Problem solving		
AFT-CHR	Affective/ characterization	FC	Flipped Classroom			QZ	Quiz		
PSY-PER	Psychomotor/perception	BL	Blended Learning			PUZ	Puzzles		
PSY-COR	Psychomotor/ Complex Overt Response	EDU	Edutainment			CL-PR	Class Presentation		
		ML	Mobile Learning			DEB	Debate		
		ECE	Early Clinical Exposure			WP	Word puzzle		
		SIM	Simulation			O-QZ	Online quiz		
		RP	Role Plays			O-GAME	Online game-based assessment		
		SDL	Self-directed learning			M-MOD	Making of Model		
		PSM	Problem-Solving Method			M-CHT	Making of Charts		
		KL	Kinaesthetic Learning			M-POS	Making of Posters		

		W	Workshops			C-INT	Conducting interview		
		GBL	Game-Based Learning			INT	Interactions		
		LS	Library Session			CR-RED	Critical reading papers		
		PL	Peer Learning			CR-W	Creativity Writing		
		RLE	Real-Life Experience			C-VC	Clinical video cases		
		PER	Presentations			SP	Simulated patients		
		D-M	Demonstration on Model			PM	Patient management problems		
		PT	Practical			CHK	Checklists		
		X-Ray	X-ray Identification			Mini-CEX	Mini-CEX		
		CD	Case Diagnosis			DOPS	DOPS		
		LRI	Lab Report Interpretation			CWS	CWS		
		DA	Drug Analysis			RS	Rating scales		
		D	Demonstration			RK	Record keeping		
		D-BED	Demonstration Bedside			COM	Compilations		
		DL	Demonstration Lab			Portfolios	Portfolios		
		DG	Demonstration Garden			Log book	Log book		
		FV	Field Visit			TR	Trainers report		
						SA	Self-assessment		
						PA	Peer assessment		
						360D	360-degree evaluation		
						PP-Practical	Practical		
						VV-Viva	Viva		
						DOAP	Demonstration Observation Assistance Performance		
						SBA	Scenario Based Assessment		
						CBA	Case based Assessment		
						S-LAQ	Structured LAQ		
						OSCE	Observed Structured Clinical Examination		
						OSPE	Observed Structured Practical Examination		
						DOPS	Direct observation of procedural skills		

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AYURVEDACHARYA (B.A.M.S.)

THIRD PROFESSIONAL B.A.M.S.

<< Subject Name >>

(SUBJECT CODE : AyUG-)

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Name of the student :

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Examination Reg. No. :

Academic Year :

(Name of the College)

(Affiliated to –National Commission for Indian System of Medicines, New Delhi &

Name of the University)

Name of the department

Batch- _____

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Examination Seat No.: _____

Sign. of Teacher Sign. of H.O.D.

Date of Examination- _____

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Journal Cum Activity Book

DEPARTMENT OF

<< Name of Department >>

Name of the College

INDEX

Sr no	Topic	Date	Page no
1			
2			
3			
4			

Components of Journal with instructions

1. **Panchakarma equipments**

   Illustrate traditional and modern equipment used in Panchakarma, highlighting their uses and applications.

   1 Droni (Therapeutic Massage Table)

   2 Swedana yantra (Steam chamber)

   3 Nadi Swedana Yantra (Steam Therapy Apparatus)

   4 Shirodhara Set (Oil-Dripping Apparatus)

   5 Varshulika (Dhara vessel)

   6 Kati Basti / Janu Basti Moulds (Lumbar Retention Apparatus)

   7 Niruha & Anuvasana Basti yantra (Netra & Putaka)

   8 Basti Samyojana yantra (Basti mixing vessel)

   9 Nasya yantra (Nasal applicator)

2. **Panchakarma procedure**

   1. Patra Pinda Sveda (Herbal Poultice)
   2. Abhyanga (Oil Massage)
   3. Shirodhara (Oil-Pour Therapy)
   4. Udvartana (Herbal Powder Massage)
   5. Kati Basti (Lumbar Therapy)
   6. Vamana (Therapeutic Emesis)
   7. Virechana (Purgation Therapy)
   8. Niruha Basti (Medicated Enema)
   9. Anuvasana basti (Medicated Enema)
   10. Nasya (Nasal Administration)

3. **Compilation**

   Write a detailed minimum of 25 A4 size paper report on one Panchakarma topic assigned by the teacher (e.g., "Role of Basti in Vata Disorders" or "Comparative Study of Vamana and Virechana").

4. **Long case – 10 Cases**
5. **Short case – 5 Cases**

1. **Panchakarma equipments**

1 Name of Equipment:

Equivalent Classical Name:

Neat Labelled Diagram/ Picture:

Uses/ Applications

2) Essential Competency-Based Procedures

Name of Procedure:

- Indications:
- Contraindications:
- Drugs/Herbal Preparations Used:
- Samshodhana / Samshamana
- Preparatory Steps (Purva Karma):
- Main Procedure (Pradhana Karma):
- Post-Procedure Care (Pashchat Karma):

- Possible Complications and Management:

- Observations

3) Compilation

Write a detailed minimum of 25 A4 size paper report on one Panchakarma topic assigned by the teacher (e.g., "Role of Basti in Vata Disorders" or "Comparative Study of Vamana and Virechana").

4) Long Panchakarma Case

Case No 1

Name:

Age:

Sex:

Occupation:

Prakriti (Constitution):

Agni (Digestive Capacity):

Chief Complaints: Duration, severity, and location.

History of Present Illness: Onset, progression, aggravating/relieving factors.

Past History: Previous Panchakarma therapies, chronic illnesses.

Dosha Analysis: Vikriti (Current Imbalance), involvement of Srotas (Channels).

Ashtavidha Pariksha (Eightfold Examination): Nadi (Pulse), Mala (Stool), Mutra (Urine), etc.

Dashavidha Pariksha (Tenfold Examination)

General Examination: Built, weight, signs of Ama (Toxins).

Systemic Examination: Focus on affected systems (e.g., GI for Virechana cases).

Provisional Diagnosis: Based on Dosha imbalance.

Panchakarma Plan with Justification: Specific procedures, duration, herbs used.

Pre/Post-Procedure Care: Diet (Ahara), lifestyle (Vihara).

Outcome: Improvement in symptoms, Dosha balance, follow-up.

Signatures: Consultant Student.

5) Short Panchakarma Case –

Case No 1

- Patient Demographics: Brief details.

- Chief Complaints: Focused presentation.

- Dosha Analysis: Key findings.

- Procedure Performed: E.g., Abhyanga, Nasya.

- Outcome: Immediate results and recommendations.

Signature of Student **Signature of Consultant**

COURSE CURRICULUM FOR THIRD PROFESSIONAL BAMS
(PRESCRIBED BY NCISM)



Shalya Tantra
(General Surgery)

(SUBJECT CODE : AYUG-ST)

(Applicable from 2021-22 batch, from the academic year 2024-25 onwards for 5 batches or until further notification by NCISM, whichever is earlier)

ncism

।। आयुषे सर्वलोकानाम् ।।

BOARD OF AYURVEDA
NATIONAL COMMISSION FOR INDIAN SYSTEM OF MEDICINE
NEW DELHI-110026

NCISM

III Professional Ayurvedacharya
(BAMS)
Subject Code : AYUG-ST

Shalya Tantra
(General Surgery)

Summary

Total number of Teaching hours: 375			
Lecture (LH) - Theory		**125**	**125(LH)**
Paper I	60		
Paper II	65		
Non-Lecture (NLHT)		**58**	**250(NLH)**
Paper I	20		
Paper II	38		
Non-Lecture (NLHP)		**192**	
Paper I	100		
Paper II	92		

Examination (Papers & Mark Distribution)					
Item	**Theory Component Marks**	**Practical Component Marks**			
		Practical	**Viva**	**Elective**	**IA**
Paper I	100	100	70	-	30
Paper II	100				
Sub-Total	200	200			
Total marks	400				

Important Note :- The User Manual III BAMS is a valuable resource that provides comprehensive details about the curriculum file. It will help you understand and implement the curriculum. Please read the User Manual III before reading this curriculum file. The curriculum file has been thoroughly reviewed and verified for accuracy. However, if you find any discrepancies, please note that the contents related to the MSE should be considered authentic. In case of difficulty and questions regarding curriculum write to **syllabus24ayu@ncismindia.org**

PREFACE

Shalya Tantra, the ancient Indian science of surgery, holds a distinguished place in Ayurveda due to its rich tradition of surgical excellence and innovation. Rooted in classical texts like Sushruta Samhita, this discipline emphasizes both fundamental principles and evolving surgical advancements. The undergraduate curriculum in Shalya Tantra is designed to provide students with a comprehensive understanding of surgical interventions, integrating traditional Ayurvedic techniques with contemporary surgical practices. This structured approach ensures that students develop the knowledge and skills necessary to diagnose and manage various surgical conditions effectively.

The syllabus encompasses a wide range of topics, including surgical anatomy, physiology, diagnostic methods, pre- and post-operative care, and therapeutic interventions for conditions such as anorectal disorders, abdominal surgery, orthopedic procedures, and plastic surgery. Additionally, emphasis is placed on wound management, tissue repair, and Ayurvedic pharmacology relevant to surgical practice. To enhance competency, the course integrates lecture-based learning with practical demonstrations, case studies, and group discussions. Students also receive hands-on training using simulators, ensuring they gain real-world surgical skills while adhering to evidence-based practice and research methodologies.

In the third professional year, Shalya Tantra plays a pivotal role in shaping a student's clinical acumen and surgical expertise. This stage bridges the gap between theoretical knowledge and practical application, preparing students to approach surgical conditions holistically. The integration of modern teaching-learning (TL) methods such as problem-based learning (PBL), clinical simulations, and interactive case discussions further refines their diagnostic and decision-making abilities. By fostering innovation and research orientation, the curriculum ensures that future Ayurvedic surgeons are well-equipped to uphold the legacy of Shalya Tantra while adapting to contemporary healthcare advancements

INDEX

Course Code and Name of Course 5
Table 1 : Course learning outcomes and mapped PO 5
Table 2 : Contents of Course 6
Paper 1 6
Paper 2 14
Table 3 : Learning objectives of Course 27
Paper 1 27
Paper 2 120
Table 4 : NLHT Activity 230
Table 5 : List of Practicals 234
Table 6 : Assessment Summary: Assessment is subdivided in A to H points 240
6 A : Number of Papers and Marks Distribution 240
6 B : Scheme of Assessment (Formative and Summative) 240
6 C : Calculation Method for Internal assessment Marks 240
6 D : Evaluation Methods for Periodical Assessment 241
6 E : Question Paper Pattern 242
6 F : Distribution of theory examination 243
Paper 1 243
Paper 2 244
6 G : Instructions for UG Paper Setting & Blue print 246
6 H : Distribution of Practical Exam 247
References Books/ Resources 248
Syllabus Committee 252
Abbreviations 257

Course Code and Name of Course

Course code	Name of Course
AYUG-ST	Shalya Tantra

Table 1 : Course learning outcomes and mapped PO

SR1 CO No	A1 Course learning Outcomes (CO) AYUG-ST At the end of the course AYUG-ST, the students should be able to-	B1 Course learning Outcomes mapped with program learning outcomes.
CO1	Apply knowledge, critical thinking, and analytical skills for diagnosis and management of Shalya Tantra conditions with relevant contemporary science.	PO1,PO2
CO2	Demonstrate the common surgical and parasurgical procedures competently	PO4
CO3	Demonstrate adequacy of patient care through effective communication and interpersonal skills.	PO8
CO4	Promote awareness of Ayurvedic surgical practices within the community, advocating for healthcare policies that integrate traditional and modern surgical practices	PO5,PO6,PO7,PO8,PO9
CO5	Select, and apply appropriate methods /procedures and resources in patient management related to computing technical tools with an understanding of the limitations of Ayurveda and modern medicine.	PO2,PO3,PO4
CO6	Recognize surgical emergencies and trauma cases, coordinate resuscitative measures and manage accordingly or by referral for expert care at the optimum time.	PO5,PO9
CO7	Demonstrate professionalism with high ethical standards, imbibing the leadership quality, and be committed to continuous improvement of skills and knowledge in the field of Shalya Tantra research.	PO3,PO7,PO9

Table 2 : Contents of Course

Paper 1 (Fundamentals of Shalya Tantra)						
Sr. No	**A2 List of Topics**	**B2 Term**	**C2 Marks**	**D2 Lecture hours**	**E2 Non-Lecture hours Theory**	**E2 Non-Lecture hours Practical**
1	**Introduction to Shalya Tantra (Introduction to development of surgery)** 1. Definition of Shalya, Shalya Tantra and its Importance. 2. Chronological development of surgery from ancient to present era. 3. General scheme of surgical case taking. 4. Special signs and symptoms pertaining to surgery.	1	15	1	1	4
2	**Yantra and Shastra (Blunt and sharp instruments)** 1. Yantra - Nirukti, Prakara, Guna, Prayog, Dosha, Karma, Upayantra and Relevant modern instruments. 2. Shastra - Nirukti, Prakara, Guna, Prayog, Dosha, Karma, Anushastra and Relevant modern instruments. 3. Demonstration (Comparison and classification with modern instruments)	1		2	0	2
3	**Nirjantukarana (Sterilization)** 1. Sterilization – Methods and Types. 2. Knowledge about Vranitagara. 3. Aseptic techniques, Sterilization and Disinfection of Surgical instruments, OT sterilization. 4. Hands on training - Hand washing techniques, Donning of Gloves and Gown.	1		1	1	4
4	**Sangyaharana (Anaesthesia)** 1. Sthaniya Sangyaharana (Local anaesthesia) – Medicines, Techniques, Indications, Contraindications, Complications and Management. 2. Kshetriya and Samanya Sangyaharana (Regional and General anaesthesia) -	1		2	2	4

	Medicines, Techniques, Indications, Contraindications, Complications and Management. 3. Principles of preoperative assessment. 4. Demonstration/Hands on Training - CPR. 5. Demonstration/Hands on Training - maintenance of an airway / endotracheal intubation in a mannequin. 6. Principles of safe General Surgery and Surgical Ethics.					
5	**Trividha Karma (Pre, Operative and Post Operative care)** 1. Trividha Karma – Purva Karma (in relation to instruments, patient and procedure), Pradhana Karma – Ashtavidha Shastra Karma (Surgical/Parasurgical procedures), Paschat Karma – Post operative care of patient. 2. Steps to obtain informed consent for a procedure in a patient/simulated environment. 3. Observe common surgical procedures and assist in minor surgical procedures; Observe emergency lifesaving surgical procedures.	1		1	1	2
6	**Shastra Karma (Operative procedure)** 1. Ashtavidha Shastra Karma - Nirukti, Yogya, Ayogya, Prakara with modern correlations of Chhedan, Bhedan and Lekhan. 2. Ashtavidha Shastra Karma – Nirukti, Yogya, Ayogya, Prakara with modern correlations of Eshana, Aaharan and Visravan. 3. Ashtavidha Shastra Karma – Nirukti, Yogya, Ayogya, Prakara with modern correlations of Vedhan and Seevan. 4. Hands on training on Prathamopachara.(First Aid) 5. Demonstration of Chhedan (Excision), Bhedan (Incision), Lekhan (Scraping) on patient/simulator. 6. Demonstration of Vedhan and Visravan (Paracentesis of Ascitic fluid, Hydrocele-Tapping, Pleural effusion-Thoracocentesis) on the patient/simulator.	1		3	0	10

	7. Demonstration of Aharan and Eshan (Extraction and Probing) on the patient/simulator. 8. Demonstration of Seevan (Suturing and Knots) and minor surgical procedures on the patient/simulator.					
7	**Yogya (Experimental Surgical Training)** 1. Importance of Simulation-based teaching in surgical practice (Yogya Vidhi). 2. Perform Basic Surgical Skills - Hands on training on Simulators with relevant modern techniques. 3. IV canulation, IM/IV/Subcutaneous/Intradermal Injection. 4. Ryle's tube and Drains insertion. 5. Urinary catheterization.	1		1	0	8
8	**Marma (Vital points)** 1. Marma – Nirukti, Prakara and Individual Marma Viddha Lakshanas. 2. Marmaghata Chikitsa and its surgical importance. 3. Marma identification and manipulation techniques in musculoskeletal disorders (Avabahuka-Frozen shoulder, Snayugata Vata-Tennis Elbow, Gridhrasi-Sciatica, Cervical Spondylosis, etc.) and Sports Injuries.	1	5	2	0	2
9	**Kshara Karma** 1. Kshara and Kshara Karma - Nirukti, Pradhanata, Guna, Dosha, Karma, Prakara, Yogya, Ayogya, Vidhi, Upadrava and Chikitsa. 2. Clinical application of Kshara Sutra, Pratisaraneeya Kshara, Kshara Taila, Kshara Varti and Ksharodaka in different surgical conditions. 3. Video demonstration of Kshara, Kshara Sutra – Preparation and Method of application. 4. Demonstration of handling of patient with Kshara Sutra changing. 5. Demonstration and hands on training of Ksharodaka, Kshara Taila, Kshara Varti, Kshara Pichu in Dushtavrana.	1	15	2	2	4

	6. Demonstration and hands on training of Kshara Karma in Anorectal disorders. (Arsha, Bhagandara, Nadivrana etc.)					
10	**Agnikarma** 1. Agnikarma - Mahatva, Upakarana, Vidhi, Akrutibheda, Yogya, Ayogya and Upadrava Chikitsa. 2. Dhumopahat & Ushna Vatatap Dagdha Lakshan and Chikitsa. Contemporary techniques and tools of Agnikarma. 3. Hands on experience of Agnikarma in the Pain management of any one disease (Gridhrasi, Avabahuka etc.). 4. Hands on experience of Agnikarma as disease modifying management of any one surgical disease (Arsha, Charmakeel etc.).	1		2	0	4
11	**Raktamokshana** 1. Raktamokshana - Mahatva, Prakara. Siravedha - Yogya, Ayogya, Vidhi, Upadrava and Chikitsa. 2. Pracchanna, Shringa, Alabu - Yogya, Ayogya, Vidhi, Upadrava and Chikitsa. 3. Jaloukavacharana – Yogya, Ayogya, Vidhi, Upadrava and Chikitsa. 4. Hands on experience of Siravedha as disease modifying management of any one surgical disease (Grudhrasi, Uttan Vatarakta etc.). 5. Hands on experience of Alabu as disease modifying management of any one surgical disease (Katigraha, Manya Graha etc.). 6. Hands on experience of Jaloukavacharana (Leech Therapy) as disease modifying management of any one surgical disease (Vidradhi, Dushtavrana, Koth etc.).	1		3	0	6
12	**Bandha Vidhi** 1. Bandha Vidhi – Prayojana, Dravya (Pichu, Plota, Kavalika and Vikeshika), Yogya, Ayogya, Prakara and Upadrava. 2. Hands on training on Simulator with relevant modern techniques of Bandaging. 3. Brief knowledge of Splints (Ayurveda and Modern). 4. Transportation of injured patient (Double	1	6	1	1	4

	Human Crutch, Fireman's Lift, Two-handed seat etc.) and recovery position.					
13	**Pranashta Shalya** 1. Pranashta Shalya and Nirharana Upaya (Identification and Principles of management). 2. Heimlich Maneuver- Hands on training (Choking).	1		1	0	2
14	**Fluid, Electrolyte, Acid Base Balance and Nutrition in surgical practice** 1. Introduction to Physiology of Fluids and Electrolytes. 2. Dehydration and Over hydration. 3. Specific electrolyte loss, Acidosis, Alkalosis, Symptomatology and Management. 4. Parenteral Nutrition. 5. Calculations and Selections of fluids in various conditions like Dehydration, Shock, Burns etc. 6. Acid Base Balance in various conditions like perforation, vomiting etc.	1	5	3	1	4
15	**Rakta** 1. Rakta Mahatva and Rakta - Chaturtha Dosha. 2. Raktasrava - Prakara and Lakshana. Haemorrhage and its management. 3. Raktastambhana - Haemostasis. 4. Raktadhan (Blood Transfusion) - Blood groups, Compatibility, Indications, Contraindications and Complications with Management. Component Therapy.	1		2	2	0
16	**Life Saving and Emergency Medicines in surgical practice (Prana Rakshaka and Atyayika Dravya)** 1. Jeevanurodhak Dravya (Antibiotics)- Classification, Indications, Contraindications and Dose**.** 2. Vedanaprashamana and Shothaprashamana Dravya (Analgesics and Anti-inflammatory Drugs) - Classification, Indications, Contraindications and Dose.	1	4	3	0	0

	3. Atyayik Dravya (Emergency Drugs) - Atropine, Adrenaline, Dopamine Mephentine Hydrochloride, Hydrocortisone, Dexamethasone, Antiemetic drugs - Indications, Contraindications and Dose in surgical practice.					
17	**Naidanik Vidhi (Diagnostic techniques)** 1. Chhaya Vikiran (X-Ray), Avayava Pariksha (Ultrasonography, CAT Scan, MRI) – Principles, Method, Indications and Contraindications. 2. Kosha Pariksha (Biopsy/Cytological study) - Principles, Method, Indications and Contraindications. 3. Chhaya Vikiran (X-rays) of Chest, Abdomen, Urology and Musculoskeletal diseases. (Interpretation) 4. Demonstration of CT, MRI of Chest, Abdomen, Urology, Bones and Joints. 5. Different types of Biopsy. (Hands-on training)	1		2	0	6
18	**Shat Kriyakala in surgical practice** 1. Shat Kriyakala in surgical practice. 2. Shat Kriyakala of Arsha, Bhagandara with a special focus on infective pathology, e.g., Unduka Pucha Shotha (Appendicitis), Pittashaya Shotha (Cholecystitis) etc.	2	5	1	0	2
19	**Samanya Vyadhi Parichaya** 1. Vranashotha (Inflammation) - Nirukti, Nidana, Samprapti, Prakara, Lakshana, Sadhya-Asadhyata, Upadrava and Chikitsa. 2. Vidradhi (Abscess) and Pidika (Boils) - Nidana, Samprapti, Prakara, Lakshana, Sadhya-Asadhyata, Upadrava and Chikitsa. 3. Pramada Dagdha/Dagdha Vrana (Burn) - Etiopathogenesis, Classification, Assessment of Burn, Complications and Management of Burn. 4. Marmaghata (Shock) - Definition, Classification, Etiopathogenesis, Clinical features, Diagnosis and Management of	2	10	6	3	6

	Hypovolaemic, Traumatic and Neurogenic Shock. 5. Cardiogenic & Septic Shock and Crush syndrome - Etiopathogenesis, Clinical features, Diagnosis and Management. 6. Kotha (Gangrene) – Etiopathogenesis, Types, Clinical features, Investigations, Differential Diagnosis, Complications and Management. 7. Granthi (Dermoid Cyst and Sebaceous Cyst) - Nidana, Prakara, Samprapti, Lakshana and Chikitsa. 8. Arbuda - Nidana, Prakara, Samprapti, Lakshana and Chikitsa. 9. Tumour - Definition, Classification, Clinical features, Complications and Management. 10. Examination of Granthi (lump or swelling). 11. Emergency management in different types of Shock (Case presentation/PBL/Roleplay). 12. Assessment and documentation of Pramada Dagdha (Burn case).					
20	**Vrana** 1. Vrana – Nirukti, Prakara, Nidana, Samprapti, Vrana Vastu, Prakara, Lakshana, Vrana Pariksha and Vrana Sadhya-Asadhyata. 2. Vrana Avastha - Dustavrana, Shuddha Vrana, Ruhyamana Vrana, Samyak Roodha Vrana, Pathya-Apathya and Vrana Upadrava. 3. Vrana Chikitsa –Shashti Upakrama – first 21 Upakramas. 4. Shashti Upakrama –22 to 40 Upakramas. 5. Shashti Upakrama – 41 to 60 Upakramas except Ashtavidha Shastra Karma. 6. Ulcer – Definition, Types, Wound healing stages and Management. 7. Prameha Pidaka - Diabetic carbuncle and wounds. 8. Sadhyo Vrana (Traumatic wounds) – Nidana, Prakara, Lakshana, Upadrava and Chikitsa. 9. Examination of an Ulcer. 10. Examination of the Peripheral nerve lesions. 11. Surgical site infection.	2	10	7	2	6

	12. Demonstration of wound dressings.					
21	**Kshudra Roga** 1. Kshudra Roga - Clinical features. 2. Kshudra Roga - Management. 3. Examination of the Hand.	2	3	2	0	2
22	**Manya Vikara** 1. Galaganda, Gandamala, Apachi - Nidana, Samprapti, Lakshana and Chikitsa. 2. Pashanagardabha (Parotitis) – Etiopathogenesis, Clinical features, Investigations, Differential Diagnosis, Complications and Management. 3. Thyroid gland - Surgical anatomy and Physiology. 4. Galaganda (Goitre)- Etiopathogenesis, Clinical features, Investigations, Differential Diagnosis, Complications and Management. 5. Toxic Goitre, Thyroiditis - Clinical features and Management. 6. Neoplasms of Thyroid - Clinical features and Management. 7. Examination of Thyroid gland. 8. Examination of the Gala (Neck). 9. Examination of a Lymphatic system.	2	5	3	3	6
23	**Sira Vikara (Venous Disorders)** 1. Surgical Anatomy and Pathology. 2. Superficial and Deep Venous Thrombosis - Etiopathogenesis, Clinical features, Investigations, Differential Diagnosis, Complications and Management. 3. Sira Granthi (Varicose veins) - Etiopathogenesis, Clinical features, Investigations, Differential Diagnosis, Complications and Management. 4. Clinical examination of Sira Granthi (Varicose veins). 5. Clinical examination of Siraja Vrana (Venous Ulcers). 6. Examination and differential diagnosis of unilateral and bilateral Lower Limb Oedema.	2	10	3	1	4
24	**Dhamani Vikara (Arterial disorders)**	2		3	0	2

	1. Dhamani Granthi (Aneurysm)– Etiopathogenesis, Clinical features, Investigations, Differential Diagnosis, Complications and Management. 2. Buerger's Disease - Etiopathogenesis, Clinical features, Investigations, Differential Diagnosis, Complications and Management. 3. Raynaud's Disease - Etiopathogenesis, Clinical features, Investigations, Differential Diagnosis, Complications and Management. 4. Examination of the Dhamani Vikara (Arterial disorders).					
25	**Snayu Vikara (Diseases of tendons and ligaments)** 1. Snayu Shotha (Tendonitis), Pratan Shotha (Tenosynovitis), Pratan Granthi (Ganglion), Dupuytren's Contracture - Etiopathogenesis, Clinical features, Investigations and Management. 2. Amputation –Definition, Classification, Indications, Contraindications and Complications. 3. Techniques of Amputation With examples of individual amputation – Video Demonstration/Hands-on training on simulator. 4. Examination of Diseases of Snayu Vikara (Diseases of tendons and ligaments).	2	5	2	0	4
26	**AIDS - HIV and Hepatitis (B and C)** 1. Etiopathogenesis, Diagnosis and Management. 2. Demonstration of safety precautions and care needs to be taken in the infected patients.	2	2	1	0	2
Total Marks			**100**	**60**	**20**	**100**

Paper 2 (Shalya Tantra Chikitsa Siddhanta)						
Sr. No	**A2 List of Topics**	**B2 Term**	**C2 Marks**	**D2 Lecture hours**	**E2 Non-Lecture hours**	**E2 Non-Lecture hours**

					Theory	Practical
27	**Bhagna (Skeletal Injuries)** 1. Asthi Bhagna/Kanda Bhagna (Fracture) - Nidana, Prakara, Lakshana, Upadrava and Chikitsa. 2. Ansaphalaka Bhagna (Scapula Fracture), Akshakasthi Bhagna (Clavicle Fracture) - Clinical features, Diagnosis, Complications and Management. 3. Pragandasthi Bhagna (Humerus Fracture), Bahiprakoshthasthi Bhagna (Radius Fracture), Antaprakoshthasthi Bhagna (Ulna Fracture) - Clinical features, Diagnosis, Complications and Management. 4. Urvasthi Bhagna (Femur Fracture), Janwasthi Bhagna (Patella), Antar Janghasthi and Bahir Janghasthi Bhagna (Tibia and Fibula Fracture) - Clinical features, Diagnosis, Complications and Management. 5. Sroni Bhagna (Fracture of the Pelvis) - Clinical features, Diagnosis, Complications and Management. 6. Sandimoksha (Dislocation) - Nidana, Prakara, Lakshana, Upadrava and Chikitsa. 7. Ansa Sandhimoksha (Shoulder joint Dislocation), Kurpara Sandhimoksha (Elbow joint Dislocation) - Clinical features, Diagnosis, Complications and Management. 8. Vankshana Sandhimoksha (Hip joint Dislocation) - Clinical features, Diagnosis, Complications and Management. 9. Examination of the Asthi Abhighata (Bone Injuries). 10. Examination of Sandhi Abhighata (Joint Injuries). 11. Hands on training - Immobilisation, Traction - skin and skeletal. 12. Hand on training - First Aid in cases of Bhagna and Sandimoksha (Fracture and Dislocation).	2	10	3	5	8
28	**Asthi Sandhi Vikara (Diseases of Bone and Joints)**	2	5	2	2	6

	1. Asthi Vidradhi (Osteomyelitis) - Aetiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management. 2. Asthi Granthi and Arbuda (Bone Cysts and Tumours) - Clinical features, Diagnosis and Management. 3. Asthi Kshaya (Bone Tuberculosis) - Aetiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management. 4. Asthi Shosha (Osteoporosis), Paget's Disease - Clinical features, Diagnosis and Management. 5. Examination of the Diseases of Bone. 6. Examination of Pathological Joints.					
29	**Shirobhighata (Cranio-cerebral Injurie/ Disorders)** 1. Shirobhighata (Scalp injury and Skull fracture) – Clinical features and Management. 2. Mastulunga Abhighata (Brain injury) - Cerebral Concussion, Contusion and Laceration. Haemorrhage - Clinical features, Diagnosis and Management. 3. Mastishka Arbuda (Benigh and Malignant tumours of Brain) – Clinical features, Diagnosis and Management. 4. Examination of Shirobhighata (Cranio-cerebral Injuries/Disorders).	2	6	2	1	2
30	**Kasheruka Vikara (Diseases of Spine)** 1. Kasheruka Kshaya (Spinal Tuberculosis) - Etiopathogenesis, Classification, Investigations, Complications and Primary Management. 2. Ankylosing Spondylitis - Etiopathogenesis, Classification, Investigations, Complications and Primary Management. 3. Examination of Kasheruka Abhighata (Spinal Injuries) and Abnormalities. 4. Clinical examination of non-traumatic spinal disorders. 5. Three stage stabilization with Logroll hands on training.	2		1	1	4
31	**Stana Roga (Diseases of Breast)**	2	5	1	2	2

	1. Stana Vidradhi (Breast abscess) - Etiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management. 2. Stana Granthi (Fibroadenoma) and Fibroadenosis - Etiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management. 3. Stana Arbuda (Benign and Malignant tumours of Breast) - Etiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management. 4. Examination of the Breast - Patient education for 'Self Examination of Breast'.					
32	**Urah Vikara (Diseases of Chest)** 1. Urah Abhighata - Chest Injury (Parshukasthi Bhagna - Fracture of Ribs, Pneumothorax, Haemothorax, Stove in Chest, Flail Chest and Surgical Emphysema) - Etiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management. 2. Phupusavarana Shotha (Pleurisy), Phupusavarana Vidradhi (Pleural Abscess), Pleural Effusion, Phupusa Granthi (Cysts of Lung), Phupusa Arbuda (Benign and Malignant tumours of Lung) - Etiopathogenesis, Classification, Clinical features, Diagnosis and Management. 3. Examination of Urah Abhigata (Injuries of the Chest). 4. Examination of Urah Vikara (Diseases of the Chest).	2	3	1	1	4
33	**Anna Nalika Vikara (Diseases of Oesophagus)** 1. Sahaja Vikara (Congenital Anomalies), Anna Nalika Shotha (Oesophagitis) - Etiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management. 2. Anna Nalika Raktasrava (Oesophageal Varices) - Etiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management. 3. Anna Nalika Arbuda (Benign and Malignant tumours of Oesophagus) -	2	2	2	1	2

	Etiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management. 4. Examination of Dysphagia.					
34	**Gulma Roga** 1. Gulma Roga - Nidana, Prakara, Lakshana, Upadrava and Chikitsa.	2	2	1	0	0
35	**Shoola Vyadhi** 1. Shoola - Nidana, Prakara, Lakshana, Upadrava and Chikitsa. 2. Examination of Acute Abdomen.	2		1	0	2
36	**Udara Roga** 1. Udara Roga (Yakritodar, Pleehodar, Chhidrodar, Baddhagudodar) - Nidana, Prakara, Samprapti, Lakshana and Chikitsa. 2. Jalodara (Ascites) - Etiopathogenesis, Clinical features, Diagnosis, Complications and Management. 3. Peritonitis - Etiopathogenesis, Clinical features, Diagnosis, Complications and Management.	2	5	1	2	2
37	**Aamashaya Evam Adho-Aamashaya Vikara (Diseases of Stomach and Duodenum)** 1. Annadrava Shoola and Parinama Shoola (Peptic Ulcer) - Etiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management.. 2. Pyloric stenosis – Clinical Diagnosis and Management. 3. Aamashaya Arbuda (Benign and Malignant tumours of Stomach) - Clinical Diagnosis and Management. 4. Examination of Abdominal Lump.	2	12	2	1	2
38	**Kshudrantra Vikara (Diseases of Small Intestine)** 1. Kshudrantra Kshaya Janya Vikara (Tuberculosis of Intestine) - Etiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management. 2. Blind Loop Syndrome, Short Bowel	2		4	2	1

	Syndrome and Typhoid Enteritis - Etiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management. 3. Kshudrantra Arbuda (Benign and Malignant tumours of Intestine) - Clinical features, Diagnosis and Management. 4. Baddhagudodar (Intestinal Obstruction) - Etiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management. 5. Antrantara Pravesha (Intussusception) - Etiopathogenesis, Clinical features, Diagnosis, Complications and Management. 6. Chidrodara (Perforation) - Etiopathogenesis, Clinical features, Diagnosis, Complications and Management. 7. Per Abdominal Examination.					
39	**Brihadantra Vikara (Diseases of Large Intestine)** 1. Grahani (Crohn's Disease and Ulcerative Colitis) - Etiopathogenesis, Clinical features, Diagnosis, Complications and Management. 2. Unduka Puchha Shotha (Appendicitis) - Etiopathogenesis, Clinical features, Diagnosis, Complications and Management 3. Brihadantra Arbuda (Benign and Malignant tumours of Colon) - Etiopathogenesis, Clinical features, Diagnosis, Complications and Management. 4. Examination of Chronic Abdomen.	2		2	1	1
40	**Guda Vikara (Diseases of Rectum and Anal Canal)** 1. Surgical Anatomy and Physiology. 2. Gudabhramsha (Prolapse of the rectum) - Etiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management. 3. Guda Vidradhi (Anorectal Abscesses) - Etiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management.	3		5	4	4

	4. Bhagandara (Fistula-in-ano) - Etiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management. 5. Arsha - Nidana, Prakara, Samprapti, Lakshana and Chikitsa. 6. Haemorrhoids - Etiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management. 7. Parikartika (Fissure-in-ano) - Etiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management. 8. Guda Arbuda (Benign and Malignant tumours of Rectum and Anal Canal) - Etiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management. 9. Shalyaja Nadi Vrana (Pilonidal Sinus), Guda Paka (Proctitis), Guda Kandu (Pruritis Ani) and Guda Abhighata (Injuries of Anorectal Region) –Clinical features and Management. 10. Examination of a Nadivrana (Sinus) and Bhagandara (Fistula). 11. Examination of Anorectal Cases.					
41	**Udarabhighata (Abdominal Injuries)** 1. Udarabhighata (Abdominal Injuries) – Clinical features and Management. 2. Examination of Udarabhighata (Abdominal Injuries).	3		1	0	2
42	**Yakrit Vikara (Diseases of Liver)** 1. Yakrit Abhighata (Liver Injury) - Etiology, Clinical features, Diagnosis and Emergency management. 2. Yakrit Vidradhi (Liver Abscess) and Yakrit Granthi (Cysts of Liver) - Etiology, Clinical features, Diagnosis and Management. 3. Yakrit Arbuda (Benign and Malignant tumours of Liver) - Etiology, Clinical features, Diagnosis, Classification and Management. 4. Demonstration of Surgical anatomy of the Liver, Acute Liver Injury on the	3	15	3	1	10

	patient/simulator. 5. Videographic demonstration of diagnosis and evaluation of Surgical Jaundice on the patient/simulator. 6. Group Discussion on the case of Yakrit Abhighata (Acute Liver Injury). 7. Practical / Videographic demonstration of Yakritodara (Hepatomegaly) and Yakrit Vidradhi (Liver Abscess) on the patient/simulator. 8. Videographic demonstration of Case of Portal Hypertension on the patient/simulator. 9. Videographic demonstration of Surgical Management of Portal Hypertension.					
43	**Pittashaya Vikara (Diseases of Gall Bladder)** 1. Surgical Anatomy and Physiology, Sahaja Vikara (Congenital Anomalies). 2. Choledochal Cyst and Congenital Biliary Atresia, Pittashaya Ashmari (Cholelithiasis) - Etiology, Clinical features, Diagnosis, Complications and Management. 3. Pittashaya Shotha (Cholecystitis) and Choledocholithiasis - Etiopathogenesis, Clinical features, Diagnosis, Complications and Management. 4. Videographic demonstration of Biliary atresia and its complications on patient/simulation. 5. Videographic demonstration of MRCP and ERCP on the patient/simulator. 6. Demonstration of Pittashaya Shotha (Cholecystitis) on the patient/simulator. 7. Class discussion/Case presentation /Video demonstration/Roleplay/Clinical Diagnosis of Hepatobiliary Diseases.	3		2	1	8
44	**Agnyashaya Vikara (Diseases of Pancreas)** 1. Surgical Anatomy and Physiology, Sahaja Vikara (Congenital Anomalies). 2. Agnyashaya Shotha (Pancreatitis) - Etiopathogenesis, Classification, Clinical features, Investigations, Diagnosis, Complications and Management. 3. Agnyashaya Granthi (Cysts and Pseudocyst of Pancreas) - Etiopathogenesis, Clinical features, Diagnosis and Management.	3	5	3	1	6

	4. Agnyashaya Arbuda (Benign and Malignant tumours of Pancreas), Insulinoma and Zollinger Ellisson Syndrome - Clinical features, Diagnosis and Management. 5. Class discussion/Case presentation/Video demonstration/Roleplay of Agnyashaya Abhighata (Pancreatic Injury) and Agnyashaya Shotha (Pancreatitis) on the patient/simulator. 6. Presentation/Video demonstration/Roleplay of demonstration of Pseudo Pancreatic cyst on the patient/simulator. 7. Class discussion/Case presentation/Video demonstration/Roleplay of demonstration of Agnyashaya Arbuda (Benign and Malignant tumours of Pancreas).					
45	**Pleeha Vikara (Diseases of Spleen)** 1. Surgical Anatomy and Physiology, Sahaja Vikara (Congenital Anomalies). 2. Pleeha Abhighata (Rupture of Spleen) - Etiopathogenesis, Classification, Clinical features, Investigations and Management. 3. Hypersplenism and Pleeha Vridhi (Splenomegaly) - Etiopathogenesis, Classification, Clinical features and Management. 4. Class discussion/Case presentation/Video demonstration/Roleplay for Demonstration of Pleeha Vridhi (Splenomegaly) on the patient/simulator.	3		3	0	2
46	**Vrikka Evam Mutravahini Vikara (Diseases of Kidney and Ureters)** 1. Surgical Anatomy and Physiology, Sahaja Vikara (Congenital Anomalies). 2. Vrikka Granthi (Polycystic Kidney), Horse shoe Kidney - Etiopathogenesis, Clinical features, Diagnosis and Management. 3. Vrikka Evam Mutravahini Vikara Abhighata (Injuries to Kidneys and Ureters) – Clinical features and Management. 4. Hydronephrosis - Etiopathogenesis, Classification, Clinical features and Management. 5. Pyelonephritis - Etiopathogenesis, Classification, Clinical features and	3	15	5	4	2

	Management. 6. Vrikka Vidradhi (Perinephric Abscess and Renal Abscess) - Etiopathogenesis, Clinical features and Management. 7. Vrikka Ashmari (Renal Calculus) - Etiopathogenesis, Types, Clinical features, Investigations, Complications and Management. 8. Mutravahini Ashmari (Ureteric Calculus) - Etiopathogenesis, Classification, Clinical features, Investigations and Management. 9. Vrikka Arbuda (Benign and Malignant tumours of the Kidney) - Etiopathogenesis, Classification, Clinical features and Management. 10. Class discussion/Case presentation/ Video demonstration/Roleplay of case of Chronic Kidney Disease.					
47	**Mutrashaya Vikara (Diseases of Urinary bladder)** 1. Surgical Anatomy and Physiology, Sahaja Vikara (Congenital Anomalies). 2. Mutrashaya Shotha (Cystitis) - Etiopathogenesis, Clinical features, Diagnosis and Management. 3. Mutrashmari (Vesical Calculus) - Etiopathogenesis, Clinical features, Diagnosis, Investigations and Management. 4. Mutrashaya Arbuda (Benign and Malignant tumours of Urinary Bladder) - Etiopathogenesis, Clinical features, Diagnosis, Complications and Management. 5. Video demonstration of the process of Cystoscopy, PCNL and ESWL on the patient/simulator. 6. Raktamutrata (Haematuria), Mutra Kshaya (Oliguria), Mutra Sankshaya (Anuria), Neurogenic Bladder - Case evaluation/Class presentation/Roleplay/Group discussion. 7. Examination of Urinary case.	3		3	2	4
48	**Mutraghata and Mutrakrichra** 1. Mutrakrichra (Dysuria) - Nidana, Samprapti, Prakara, Lakshana, Upadrava and Chikitsa.	3		2	0	2

	2. Mutraghata (Retention of Urine) - Nidana, Samprapti, Prakara, Lakshana, Upadrava and Chikitsa. 3. Video demonstration of Suprapubic Catheterization.					
49	**Paurusha Granthi Vikara (Diseases of Prostate)** 1. Surgical Anatomy and Physiology. 2. Paurusha Granthi Shotha (Prostatitis), Paurusha Granthi Vidradhi (Prostatic Abscess) - Etiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management. 3. Mutrashtheela/Vatashtheela (Benign Prostatic Hyperplasia) - Etiopathogenesis, Clinical features, Diagnosis, Complications and Management. 4. Paurusha Granthi Arbuda (Benign and Malignant tumours of Prostate) - Etiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management. 5. Demonstration of Prostatic Enlargement through Digital rectal examination on the patient/simulator. 6. Video demonstration of TURP on the patient/simulator.	3		3	1	4
50	**Mutramarga Vikara (Diseases of Urethra)** 1. Mutramarga Sahaja Vikara (Congenital Anomalies of Urethra) – Etiopathogenesis, Diagnosis and Treatment. 2. Mutramarga Shotha (Urethritis) - Etiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management. 3. Mutramarga Abhighata (Injuries to Urethra) and Mutramarga Sankocha (Urethral Stricture) - Clinical features and Management.	3		2	1	0
51	**Medhra Vikara (Diseases of Penis)** 1. Sahaja Vikara - Congenital Anomalies (Hypospadias, Epispadias and Ectopia Vesicae) - Clinical features, Diagnosis, Complications and Management.	3	15	3	2	2

	2. Parivartika (Paraphimosis), Avapatika (Preputial Tear) - Etiopathogenesis, Clinical features, Diagnosis, Complications and Management. 3. Niruddha Prakasha (Phimosis) - Etiopathogenesis, Clinical features, Diagnosis, Complications and Management. 4. Medhra Paka (Balanoposthitis) - Etiopathogenesis, Clinical features, Diagnosis, Complications and Management. 5. Medhra Arbuda (Benign and Malignant tumours of Penis), Peyronie's Disease and Granuloma Inguinale - Etiopathogenesis, Clinical features, Diagnosis, Complications and Management. 6. Examination of Male External Genitalia.					
52	**Mushka Evum Vrishan Vikara (Diseases of Scrotum and Testis)** 1. Vrishan Shotha (Epididymo-orchitis), Vrishan Granthi (Epididymal Cyst), Vrishan Siraja Granthi (Varicocele), Spermatocele, Scrotal Filariasis - Etiopathogenesis, Clinical features, Diagnosis, Complications and Management. 2. Avatarita Vrishan (Undescended Testis), Asthanik Vrishan (Ectopic Testis), Vrishan Vivartan (Torsion of Testis), Vrishan Arbuda (Benign and Malignant tumours of Testis) - Etiopathogenesis, Clinical features, Investigations, Diagnosis, Complications and Management. 3. Examination of Mushka (Scrotum) and Vrishan (Testis). 4. Examination of Inguino-Scrotal Swelling.	3		2	0	4
53	**Vriddhi Roga** 1. Vriddhi Roga - Nidana, Prakara, Lakshana and Chikitsa. Mutravriddhi (Hydrocele)-Etiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management. 2. Examination and Differential Diagnosis of Mutravriddhi (Hydrocele).	3		1	0	2

54	**Antravriddhi (Hernia)** 1. Surgical Anatomy of Inguinal Canal. Hernia (In general) - Definition, Etiology, Classification and Diagnosis. 2. Antravriddhi (Inguinal Hernia) - Etiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management. 3. Vankshanstha Vriddhi (Femoral Hernia) - Surgical Anatomy of Femoral Canal, Etiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management. 4. Epigastric Hernia - Etiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management. 5. Nabhigata Vriddhi (Umbilical Hernia and Para umbilical Hernia) - Etiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management. 6. Shastrotar Vriddhi (Incisional Hernia) - Etiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management. 7. Examination of Antravriddhi (Inguinal Hernia), Nabhigata Vriddhi (Umbilical Hernia) and Shastrotar Vriddhi (Incisional Hernia) on the patient/simulator. 8. Video demonstration of Hernia Surgery.	3		4	2	4
Total Marks			**100**	**65**	**38**	**92**

Table 3 : Learning objectives of Course

Paper 1 (Fundamentals of Shalya Tantra)										
A3 Course outcome	**B3 Learning Objective (At the end of the session, the students should be able to)**	**C3 Domain/sub**	**D3 MK / DK / NK**	**E3 Level**	**F3 T-L method**	**G3 Assessment**	**H3 Assessment Type**	**I3 Term**	**K3 Integration**	**L3 Type**
Topic 1 Introduction to Shalya Tantra (Introduction to development of surgery) (LH :1 NLHT: 1 NLHP: 4)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO1	Define Shalya, Shalya Tantra, and its importance.	CK	DK	K	L&PPT ,REC,L	DEB,PUZ, C-INT,QZ ,P-REC	F&S	I	-	LH
CO1	Explain Chronological Development of Surgery from ancient to present era	CK	DK	K	PER,L& PPT ,L	P-EXAM,QZ ,DEB,P-VIVA	F&S	I	-	NLHT1.1
CO1, CO3	Perform a comprehensive patient assessment, systematically examine, identify key clinical findings, and effectively communicate them for accurate diagnosis and management.	CK	MK	KH	L,CBL, PT,CD, L&PPT	VV-Viva,P-EXAM,CBA,SBA,Log book	F&S	I	-	NLHP1.1
CO1, CO3, CO4	Describe clinical identification and assessment of pain, cyanosis, and clubbing, is crucial for diagnosing various medical conditions.	CK	MK	KH	D-BED, CBL,CD,PT,L &PPT	P-EXAM,CBA,PP-Practical,P-CASE,DOAP	F&S	I	-	NLHP1.2

Non Lecture Hour Theory

S.No	**Name of Activity**	**Description of Theory Activity**
NLHT 1.1	History of surgery	Compilation & Presentation

Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 1.1	Surgical case taking	**Steps** 1. Patient History: Chief Complaint: Ask the patient to describe their primary concern or symptom. History of Present Illness: Gather detailed information about the onset, duration, and nature of the symptoms. Ask about any aggravating or relieving factors and associated symptoms. Past Medical History: Inquire about previous illnesses, surgeries, hospitalizations, and ongoing medical conditions. Medication History: List all medications the patient is currently taking, including dosages and duration. Family History: Ask about any relevant medical conditions in the patient's family. Social History: Explore lifestyle factors such as smoking, alcohol,tobacco chewing. Review of Systems: Conduct a systematic inquiry about symptoms related to different organ systems to identify any other issues. 2. Physical Examination: General Examination: Assess the patient's general appearance, vital signs, and overall condition. Inspection: Observe the area of concern for any visible abnormalities such as swelling, discoloration, or deformities. Palpation: Feel the area for tenderness, masses, or other abnormalities. Percussion: Tap the area to assess underlying structures. Auscultation: Use a stethoscope to listen to any abnormal sounds related to the surgical conditions. Special Tests: Perform specific tests relevant to the suspected condition. 3. Diagnostic Investigations: Order relevant laboratory tests, imaging studies, or other diagnostic procedures to confirm the diagnosis. 4. Case Presentation: Summarize the patient's history, physical examination findings, and results of diagnostic investigations.

		Discuss the differential diagnosis and rationale for the suspected condition. Outline the proposed management plan, including surgical and non-surgical options. **Recapitulation:** Thorough Assessment: A comprehensive history and physical examination are crucial for accurate diagnosis and effective management of surgical cases. Interdisciplinary Approach: Collaboration with other healthcare professionals ensures a holistic approach to patient care. Patient Communication: Clear and empathetic communication with the patient is essential for building trust and ensuring adherence to the treatment plan.
NLHP 1.2	Special signs and symptoms pertaining to surgery	**Steps:** 1. Identification of Pain: • Objective: ◦ Understand the types and characteristics of pain. • Procedure: ◦ Interview the patient to gather a detailed pain history (location, intensity, duration, quality, and factors that alleviate or worsen it). ◦ Use pain assessment scales (e.g., Visual Analog Scale, Numeric Rating Scale) to quantify pain. ◦ Observe non-verbal clues and physical signs of pain such as grimacing, guarding, or changes in vital signs. 2. Identification of Cyanosis: • Objective: ◦ Recognize cyanosis as a sign of decreased oxygenation in blood. • Procedure: ◦ Inspect areas with thin skin (lips, nail beds, earlobes) for bluish discoloration. ◦ Observe for central cyanosis (tongue, oral mucosa) vs. peripheral cyanosis (fingers, toes). ◦ Perform pulse oximetry to measure oxygen saturation levels.

- Consider underlying conditions causing cyanosis (e.g., respiratory or cardiovascular issues).

3. Identification of Clubbing:
   - Objective:
     - Identify the physical changes in fingernails and fingers indicating clubbing.
   - Procedure:
     - Inspect the patient's fingers for the characteristic rounded and bulbous appearance of clubbing.
     - Perform the Schamroth's window test (placing the dorsal side of both index fingers together to check for a small diamond-shaped window; absence indicates clubbing).
     - Note changes in the angle between the nail and nailbed and thickening of the terminal phalanges.
     - Evaluate for underlying conditions associated with clubbing (e.g., chronic lung disease, heart disease).
4. Post-Assessment Care:
   - Document findings accurately in patient records.
   - Provide patient education on the significance of these signs and symptoms.
   - Plan for further diagnostic tests or referrals based on clinical findings.
5. Student Practice:
   - Allow students to practice the assessment techniques on simulators or peers under supervision.
   - Provide constructive feedback and guidance to ensure proper technique and accurate diagnosis.

Topic 2 Yantra and Shastra (Blunt and sharp instruments) (LH :2 NLHT: 0 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO2, CO5	Define Types, Guna, Uses, Dosha, Karma of Yantra, and Upayantra along with relevant modern instruments.	CK	MK	K	L,L&PPT	P-VIVA,P-EXAM,PP-Practical,S-LAQ	F&S	I	-	LH

CO1, CO2, CO5	Define Types, Guna, Uses, Dosha, Karma of Shastra, and Anushastra along with relevant modern instruments	CK	MK	K	L,L&PPT	P-EXAM,P-VIVA,PP-Practical,Log book,INT	F&S	I	-	LH
CO1, CO2	Identify, use, and compare Yantras (traditional Ayurvedic surgical instruments) with modern surgical instruments.	CK	MK	K	D,L&PPT ,L	P-PRF,PP-Practical,P-VIVA,VV-Viva,P-EXAM	F&S	I	-	NLHP2.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 2.1	Demonstration, Comparison & classification of instruments	**Steps:** 1. Introduction to Yantras: • Provide an overview of various Yantras used in Ayurvedic surgery. • Highlight the historical significance and traditional uses of these instruments. 2. Identification of Yantras: • Display different types of Yantras such as: ◦ Swastika ◦ Sandansha ◦ Taal ◦ Nadi ◦ Shalaka ◦ Upyantra • Explain the specific uses of each Yantra in traditional surgical practices.

		3. Comparison with Modern Surgical Instruments: • Probes and Catheters: ◦ Compare traditional probes with modern flexible catheters and their advanced materials. • Forceps: ◦ Highlight the differences between Swastika Yantra and modern hemostatic forceps. • Surgical Instruments for Intestinal Surgeries: ◦ Discuss the advancements in modern laparoscopic instruments compared to Antra Yantra. • Tubes and Drains: ◦ Analyze the evolution from Nadi Yantra to sophisticated suction and drainage systems used today. 4. Practical Hands-On Training: • Allow students to practice using Yantras on simulators or models. • Supervise and provide feedback to ensure proper handling and understanding of techniques. • Demonstrate the use of corresponding modern instruments for comparison.

Topic 3 Nirjantukarana (Sterilization) (LH :1 NLHT: 1 NLHP: 4)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO2, CO7	Describe Methods & Types of sterilisation	CK	MK	K	L,L&PPT	P-PS,QZ ,P-VIVA,CL-PR	F&S	I	-	LH
CO1, CO7	Explain about Vranitagara	CC	MK	K	L&GD, L_VC,TUT,DIS, PER	M-MOD,P-EXAM,PRN,CL-PR,P-PRF	F&S	I	-	NLHT3.1
CO1, CO2,	Discuss aseptic techniques, sterilization methods, and OT sterilization while emphasizing infection control in surgical	CC	MK	SH	FV,FC, PT,D,D-	PP-Practical,P-MOD,P-	F&S	I	-	NLHP3.1

CO3	settings.				M	EXAM,P-VIVA,INT				
CO1, CO2, CO4	Demonstrate proper hand hygiene, PPE usage, and the correct techniques for donning and doffing gloves and gowns to ensure infection control.	PSY-GUD	MK	SH	DIS,L&GD,D,PT,PER	PRN,P-PRF,PP-Practical,SBA,DOPS	F&S	I	-	NLHP3.2

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 3.1	Vranitagara	Compile the information regarding Vranitagara and compare it with Ideal Surgical Ward

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 3.1	Aseptic techniques, sterilization and disinfection of Surgical instruments, OT sterilization	**Steps** Aseptic Techniques Hand Hygiene: Perform hand washing with antiseptic soap or use an alcohol-based hand sanitizer before and after patient contact. Use of Personal Protective Equipment (PPE) (if Available) Wear sterile gloves, masks, gowns, and eye protection to prevent contamination. Preparation of the Surgical Site: Clean the surgical site with antiseptic solutions, such as chlorhexidine or povidone-iodine. Maintenance of a Sterile Field: Use sterile drapes and instruments. Ensure all items in the sterile field remain uncontaminated. Aseptic Handling of Instruments: Avoid contact between sterile instruments and non-sterile surfaces. Use sterile technique when passing instruments.

		Sterilization and Disinfection of Surgical Instruments Cleaning: Rinse and scrub instruments with water and detergent to remove organic material. Disinfection: Use chemical disinfectants (e.g., glutaraldehyde, hydrogen peroxide) to reduce microbial load on instruments. Sterilization Methods: Autoclaving: Use steam under pressure at 121-134°C to sterilize heat-resistant instruments. Ethylene Oxide Gas: Suitable for heat-sensitive instruments. Requires aeration post-sterilization. Dry Heat: Use high temperatures (160-180°C) for instruments that can withstand dry heat. Chemical Sterilization: Use liquid chemicals like glutaraldehyde for instruments sensitive to heat and moisture. OT Sterilization Cleaning the Operating Room: Clean all surfaces, including floors, walls, and furniture, with disinfectant solutions. Air Sterilization: Use high-efficiency particulate air (HEPA) filters and ultraviolet (UV) light to sterilize the air. Sterilization of Equipment: Ensure all equipment used in the OT is sterilized or disinfected before use. Environmental Control: Maintain a controlled environment with appropriate temperature, humidity, and ventilation to prevent microbial growth.
NLHP 3.2	Hand washing techniques, Donning of Gloves & Gown	**Steps :** Hand Washing Techniques Preparation: Remove any jewelry (rings, watches). Wet hands with clean, running water. Apply Soap:

Apply enough soap to cover all hand surfaces.
Scrub Thoroughly:
Rub hands together to create lather.
Scrub all surfaces, including the back of hands, between fingers, and under nails, for at least 20 seconds.
Focus on thumbs, fingertips, and wrists.
Rinse:
Rinse hands thoroughly under clean, running water.
Dry Hands:
Use a clean towel or air dry hands.
Use the towel to turn off the tap if applicable.
Donning Gloves
Preparation:
Perform hand hygiene before donning gloves.
Select Appropriate Gloves:
Choose the right size and type of gloves for the task.
Don Gloves:
Hold the glove at the wrist and insert the opposite hand.
Pull the glove on, ensuring a snug fit.
Repeat for the other hand.
Donning Gown
Preparation:
Perform hand hygiene before donning the gown.
Open the Gown:
Hold the gown by the shoulders and allow it to unfold.
Don the Gown:
Insert arms into the sleeves one at a time.
Fasten the gown at the neck and waist to ensure full coverage.
Ensure Proper Fit:
Adjust the gown to cover your clothing completely.

		Make sure the gown is comfortable and allows for movement.

Topic 4 Sangyaharana (Anaesthesia) (LH :2 NLHT: 2 NLHP: 4)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO3, CO4, CO5	Describe Local Anaesthetic Drugs, Techniques, Indications, Contraindications, Complications, and their Management.	CK	MK	K	L&PPT ,L,L_VC	P-VIVA,M-POS,PP-Practical,CL-PR,QZ	F&S	I	-	LH
CO1, CO3, CO5	Explain Regional and General anaesthesia- Drugs, Techniques, Indications, Contraindications, Complications and their Management	CC	MK	K	L,L&PPT ,L&GD	P-PRF,VV-Viva,QZ ,PP-Practical, P-EXAM	F&S	I	-	LH
CO1, CO2, CO3, CO5	Describe principles of Preoperative assessment	CC	MK	K	L&GD, FC,D-BED,CD, L_VC	P-EXAM,VV-Viva,PRN	F&S	I	-	NLHT4.1
CO1, CO2, CO4, CO5, CO7	Describe Principles of safe General Surgery	CK	MK	K	L_VC,TUT,DIS, L&GD, BS	P-CASE,DEB,P-ID,P-EXAM,S-LAQ	F&S	I	-	NLHT4.2
CO1, CO2, CO4, CO6	Elaborate the basic principles of CPR.Perform effective chest compressions and rescue breaths.Recognize the signs of cardiac arrest.	CAP	MK	KH	KL,D-M,L_VC,SIM, TBL	SP,P-PRF, CHK,P-VIVA,DOPS	F&S	I	-	NLHP4.1
CO1, CO2,	Demonstrate airway management techniques, including endotracheal intubation, while emphasizing the importance of	CAP	MK	KH	SIM,D-M,L_V	P-EXAM,CHK,P-VIV	F&S	I	-	NLHP4.2

CO4, CO6	maintaining a clear airway through hands-on practice.				C,L&G D,W	A,PP-Practical,DOPS					

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 4.1	Preoperative assessment	1. Patient interview and medical history collection 2. Physical assessment (vital signs, cardiovascular, respiratory, neurological) 3. Laboratory results review and documentation 4. Medication reconciliation 5. Allergy banding and sensitivity testing 6. Patient education (surgery, anesthesia, postoperative care) 7. Informed consent verification 8. Preoperative checklist completion
NLHT 4.2	Safe General Surgery	Preoperative Principles 1. Informed consent: Patient understanding of risks, benefits, and alternatives. 2. Accurate diagnosis: Confirm diagnosis before surgery. 3. Proper patient preparation: Optimize medical conditions, fasting, and medication. 4. Surgical site marking: Verify correct site and side. Intraoperative Principles 1. Asepsis and sterilization: Maintain sterile environment. 2. Proper anesthesia: Monitor and adjust anesthesia as needed. 3. Surgical team communication: Clear communication among team members. 4. Hemostasis: Control bleeding promptly. 5. Tissue handling: Minimize tissue trauma. Surgical Technique Principles 1. Respect tissue planes: Dissect along natural tissue planes. 2. Minimize dissection: Limit tissue damage. 3. Precise incisions: Make accurate, controlled incisions. 4. Gentle tissue retraction: Avoid excessive force.

		5. Secure closure: Ensure proper wound closure. Postoperative Principles 1. Monitoring: Observe patient's vital signs and condition. 2. Pain management: Optimize pain relief. 3. Fluid management: Monitor and adjust fluid balance. 4. Wound care: Ensure proper wound dressing and closure. 5. Early mobilization: Promote timely recovery. General Safety Principles 1. Patient identification: Verify patient identity. 2. Medication safety: Ensure accurate medication administration. 3. Fire safety: Prevent surgical fires. 4. Electrical safety: Prevent electrical shock. 5. Infection control: Maintain proper infection control measures. Teamwork and Communication Principles 1. Clear communication: Ensure effective team communication. 2. Collaborative care: Foster teamwork among healthcare professionals. 3. Respect for patient autonomy: Prioritize patient-centered care. 4. Continuous learning: Encourage ongoing education and improvement. 5. Debriefing: Conduct postoperative debriefing sessions. Quality Improvement Principles 1. Monitor outcomes: Track surgical outcomes. 2. Identify errors: Analyze and learn from errors. 3. Implement changes: Improve processes based on data. 4. Continuous quality improvement: Regularly assess and improve care. 5. Patient feedback: Encourage patient feedback. Surgical Safety Checklist 1. Distribute a surgical safety checklist (e.g., WHO Surgical Safety Checklist). 2. Ask students to review and explain each item. 3. Role-play scenarios to demonstrate checklist usage

Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 4.1	Demonstration of BLS (Basic life support)	**Steps** 1. Assess the Situation: Ensure the scene is safe for both the rescuer and the victim. Check the victim for responsiveness by gently tapping and shouting. 2. Call for Help: If the victim is unresponsive, call for emergency medical services (EMS) immediately. If possible, ask a bystander to call EMS and fetch an Automated External Defibrillator (AED). 3. Check for Breathing: Look, listen, and feel for normal breathing for no more than 10 seconds. If the victim is not breathing or only gasping, begin CPR. 4. Chest Compressions: Position yourself over the victim's chest. Place the heel of one hand in the center of the chest, between the nipples. Place your other hand on top. Interlock your fingers and keep your arms straight. Push hard and fast, compressing the chest at least 2 inches deep at a rate of 100-120 compressions per minute. Allow the chest to fully recoil between compressions. 5. Rescue Breaths:After 30 compressions, give 2 rescue breaths. Tilt the victim's head back and lift the chin to open the airway. Pinch the nose shut and make a seal over the victim's mouth with yours. Deliver each breath over 1 second, watching for chest rise. Continue the cycle of 30 compressions and 2 breaths. 6. Using an AED: When the AED arrives, turn it on and follow the voice prompts. Attach the pads to the victim's bare chest as indicated. Ensure no one is touching the victim while the AED analyzes the heart rhythm. If a shock is advised, clear the area and press the shock button.

		Resume CPR immediately after the shock.
NLHP 4.2	Maintenance of an airway / Endotracheal intubation in a mannequin	**Steps** 1. Preparation: Ensure the mannequin is in a supine position. Gather all necessary equipment: laryngoscope, endotracheal tube, stylet, suction device, bag-valve-mask (BVM), and monitoring devices. 2. Assessment of the Airway: Check for any obstructions in the mouth and throat. Position the head to open the airway using the head-tilt-chin-lift maneuver or jaw-thrust maneuver if cervical spine injury is suspected. 3. Pre-oxygenation: Use a BVM to provide high-flow oxygen to the mannequin for several minutes to ensure adequate oxygenation before intubation. 4. Laryngoscopy: Hold the laryngoscope in your left hand and insert the blade into the mannequin's mouth, sweeping the tongue to the left. Visualize the vocal cords using the laryngoscope. 5. Endotracheal Tube Insertion: Hold the endotracheal tube with a stylet (if used) in your right hand. Guide the tube through the vocal cords into the trachea. Remove the stylet once the tube is in place. Inflate the cuff to secure the tube and prevent air leakage. 6. Confirmation of Tube Placement: Listen for bilateral breath sounds using a stethoscope. Observe chest rise and fall with each breath. Confirm placement with a capnography device to measure exhaled CO2. 7. Securing the Tube: Secure the endotracheal tube to the mannequin's mouth using tape or a commercial tube holder. Attach the tube to a ventilator or BVM for continued ventilation.

		8. Post-Intubation Care: Monitor the mannequin for any signs of complications, such as desaturation or abnormal breath sounds. Ensure proper maintenance of the airway and equipment.

Topic 5 Trividha Karma (Pre, Operative and Post Operative care) (LH :1 NLHT: 1 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO3, CO4	Describe the importance of Purva Karma -Preoperative procedure , Pradhana Karma – Astavidha shastra karma (in brief) , Paschat Karma – Post operative care of patient	CK	MK	K	L&PPT ,L,L&GD	PP-Practical,VV-Viva, S-LAQ,T-CS,PRN	F&S	I	-	LH
CO1, CO7	Explain the principles of informed consent and effective communication skills to obtain informed consent.	CK	MK	K	SIM,D, L&GD, D-BED,RP	T-CS,P-CASE,P-VIVA ,P-EXAM,P-PRF	F&S	I	-	NLHT5.1
CO1, CO2, CO5, CO6	Demonstrate proficiency in assisting and evaluating common and emergency minor surgical procedures while adhering to standard techniques and protocols.	CE	MK	KH	TBL,CBL,PT,D, KL	PP-Practical,CHK,DOPS,T-CS,P-EXAM	F&S	I	-	NLHP5.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 5.1	Informed consent in a simulated environment	1. Conduct a simulated patient encounter to obtain informed consent. 2. Role-play different patient scenarios (e.g., emergency, elective, pediatric). 3. Practice clear and concise explanation of: - Diagnosis - Treatment options - Risks and benefits

		- Alternatives 4. Address patient questions and concerns. 5. Document informed consent accurately
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 5.1	Common minor surgical procedures (Excision of Corn, Cysts, Lipoma, etc)	**Steps** Observing and Assisting in Common Surgical Procedures Preparation: Review the patient's medical history and procedure details. Ensure all necessary instruments and materials are sterilized and ready. Wear appropriate PPE and maintain aseptic technique. Excision of Corn: Observation: Watch how the surgeon cleans and anesthetizes the area. Observe the use of a scalpel to excise the corn, ensuring minimal damage to surrounding tissue. Assistance: Hand instruments to the surgeon, help with hemostasis, and assist with dressing the wound. Excision of Cyst: Observation: Note the steps of incision, dissection, and removal of the cyst. Observe the careful handling to avoid rupture. Assistance: Provide retraction, suction, and help with suturing the incision post-excision. Excision of Lipoma: Observation: Watch the incision and blunt dissection techniques used to remove the lipoma. Pay attention to maintaining clear margins. Assistance: Assist with retraction, instrument handling, and closing the incision with sutures. Observing Emergency Lifesaving Surgical Procedures Preparation: Be prepared for rapid decision-making and action. Ensure all emergency equipment and instruments are readily available.

		Emergent Incision and Drainage: Observation: Observe the identification and drainage of an abscess. Note the steps of incision, drainage, and packing. Assistance: Provide instruments, manage suction, and help with wound dressing. Emergency Airway Management (e.g., Tracheostomy): Observation: Watch how the surgeon identifies landmarks, makes the incision, and inserts the tracheostomy tube. Assistance: Help maintain a sterile field, handle instruments, and secure the tracheostomy tube.

Topic 6 Shastra Karma (Operative procedure) (LH :3 NLHT: 0 NLHP: 10)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1	Define, indication Contraindications,Types with modern correlations of Chedan, Bhedana, Lekhana	CK	MK	K	L,L&PPT	P-EXAM,QZ,P-VIVA,DEB,CL-PR	F&S	I	-	LH
CO1	Define Indications, Contraindications, and Types with modern correlations of Eshana, Aaharana, visravana	CK	MK	K	L,L&PPT ,PER, L_VC	T-CS,PP-Practical,VV-Viva,INT,DEB	F&S	I	-	LH
CO1	Define Indications Contraindications, and Types with modern correlations of Vedhana, Seevana	CK	MK	K	L&PPT ,L,L_VC	QZ ,PP-Practical,T-CS, VV-Viva,DEB	F&S	I	-	LH
CO1, CO2, CO5, CO6	Explain the principles and importance of first aid.Identify common emergencies requiring first aid,	CC	MK	KH	PT,KL, D-M,D,RP	DEB,VV-Viva,DOPS,P-CASE,SP	F&S	I	-	NLHP6.1

CO1, CO2, CO4	Explain the techniques and principles behind Chhedan, Bhedan, and Lekhan.Demonstrate the steps for each procedure on a simulator.	CC	MK	KH	BL,DIS, TUT,D, SIM	SP,VV-Viva,P-EXAM, P-PRF,DOPS	F&S	I	-	NLHP6.2
CO1, CO2, CO4	Demonstrate necessary practical skills regarding the procedure of Vedhan & Visravan (tapping of the abdomen, hydrocele, and insertion of an ICD) using a simulator	PSY-GUD	MK	KH	D,D-M, SIM,KL ,TUT	DOPS,CHK,P-VIVA, PRN,DEB	F&S	I	-	NLHP6.3
CO1, CO2, CO4	Demonstrate necessary practical skills to perform Aharana (extraction) and Eshana (probing) using a simulator.	PSY-GUD	MK	KH	D-M,DIS,KL,D, SIM	M-MOD,PRN,CHK,P-PRF,DOPS	F&S	I	-	NLHP6.4
CO1, CO2, CO4	Demonstrate the essential skills Seevan (suturing and knots) and minor surgical procedures.	PSY-GUD	MK	KH	PER,D-M,SIM, PT,D	P-VIVA,DOPS,CHK, P-EXAM,SP	F&S	I	-	NLHP6.5

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 6.1	First aid	**Steps** 1. Assess the Situation: Ensure Safety: Make sure the area is safe for both the rescuer and the victim. Check for Responsiveness: Tap the victim and shout to see if they respond. 2. Call for Help: If the victim is unresponsive or requires immediate medical attention, call emergency services right away.

		Provide clear information about the location and nature of the emergency. 3. Perform Basic First Aid Techniques: a. CPR (Cardiopulmonary Resuscitation): Compression: Perform chest compressions at a rate of 100-120 per minute, compressing at least 2 inches deep. Breaths: Give two rescue breaths after 30 compressions. Continue: Keep performing CPR until help arrives or the victim regains consciousness. b. Control Bleeding: Apply Pressure: Use a sterile cloth or bandage to apply pressure directly to the wound. Elevate: Raise the injured area above the level of the heart if possible. Wrap: Secure the dressing with a bandage or clean cloth. c. Treat Burns: Cool the Burn: Run cool (not cold) water over the burn for at least 10 minutes. Cover: Use a sterile, non-adhesive bandage or clean cloth to cover the burn. Do Not: Avoid applying creams, ointments, or ice directly to the burn. d. Handle Choking: Abdominal Thrusts: For conscious adults and children, perform abdominal thrusts (Heimlich maneuver) to dislodge the object. Back Blows: For infants, alternate 5 back blows and 5 chest thrusts. e. Manage Fractures: Immobilize: Keep the injured limb as still as possible using splints or padding. Elevate: Raise the limb to reduce swelling. Apply Ice: Use ice packs to minimize swelling and pain, but avoid direct contact with the skin.
NLHP 6.2	Demonstartion of Chhedan(Excision), Bhedan(Incision), Lekhan(scraping) on simulator	**Steps** **Chhedan (Excision)** Preparation: Ensure all instruments are sterilized. Position the simulator appropriately and secure it.

		Identify the area for excision. Procedure: Use a scalpel to make precise cuts around the lesion or tissue to be removed. Excise the tissue completely, ensuring clear margins. Control bleeding using hemostatic techniques. Close the wound with sutures if necessary. **Bhedan (Incision)** Preparation: Sterilize instruments and position the simulator. Identify the site for incision. Procedure: Use a scalpel to make a controlled incision in the identified area. Ensure the incision is of appropriate length and depth. Observe the response of the underlying tissues. Manage any bleeding and close the incision with sutures or staples. **Lekhan (Scraping)** Preparation: Sterilize instruments and position the simulator. Identify the area requiring scraping. Procedure: Use a curette or scraping instrument to gently remove abnormal tissue or debris. Apply consistent pressure to avoid damage to underlying healthy tissues. Collect and inspect the removed material. Clean and dress the treated area.
NLHP 6.3	Demonstration of Vedhan & Visravan (Tapping Of abdomen, Hydrocele, ICD) on simulator	**Steps:** 1. **Preparation:**

		• Ensure all necessary equipment (needles, simulators, antiseptic solutions, gloves, etc.) is sterilized and ready. • Brief the students on the procedure and safety protocols. 2. **Vedhan Procedure:** • **Tapping of Abdomen:** ◦ Identify the appropriate anatomical landmarks. ◦ Clean the area with an antiseptic solution. ◦ Insert the needle at the correct angle and depth. ◦ Collect the fluid sample. • **Hydrocele Tapping:** ◦ Identify the hydrocele sac. ◦ Disinfect the area thoroughly. ◦ Insert the needle and aspirate the fluid. • **ICD (Intercostal Drainage):** ◦ Locate the intercostal space. ◦ Clean the site and administer local anesthesia. ◦ Make a small incision. ◦ Insert the ICD at the correct angle to drain fluid or air. 3. **Post-Procedure Care:** • Remove the needle or catheter carefully. • Apply a sterile dressing to the site. • Monitor for any immediate complications. 4. **Student Practice:** • Allow students to practice the procedures on the simulator under supervision. • Provide feedback and correction as needed
NLHP 6.4	Demonstration of Aharana and Eshana (extraction and probing)on simulator	**Steps:** 1. **Preparation:** • Gather all necessary equipment (probes, extraction tools, simulators, antiseptic solutions, gloves, etc.).

		• Brief the students on the procedure and emphasize the importance of maintaining aseptic conditions. 2. **Aharana (Extraction) Procedure:** • Identify the target area for extraction • Clean the area with an antiseptic solution. • Use the extraction tool carefully to remove the material or object. • Ensure complete extraction to prevent complications. 3. **Eshana (Probing) Procedure:** • Identify the anatomical landmarks and the area to be probed. • Disinfect the area thoroughly. • Gently insert the probe to explore and identify obstructions or abnormalities. • Be mindful of depth and angle to avoid causing harm. 4. **Post-Procedure Care:** • Remove the probe or extraction tool with care. • Apply a sterile dressing to the site. • Monitor the simulator for any immediate complications or reactions. 5. **Student Practice:** • Allow students to practice the procedures on the simulator under supervision. • Provide feedback, highlighting correct techniques and areas for improvement.
NLHP 6.5	Demonstration of Seevan(Suturing & Knots) and minor surgical procedures in patient / simulated environment	**Steps:** 1. **Preparation:** • Collect all required tools (suture materials, needles, forceps, scissors, antiseptic solutions, gloves, etc.). • Brief the students on the different types of sutures and knots, including their indications and techniques. 2. **Suturing Procedure:** • **Wound Assessment:** ◦ Examine the wound to determine the appropriate suture type and technique. • **Preparation of the Wound:**

- Clean the wound thoroughly with an antiseptic solution.
- Administer local anesthesia if needed.

- **Suturing:**
  - Choose the appropriate needle and suture material.
  - Begin suturing using the selected technique Vellitaka, Gophanika, Tunna Sevani and Rujugranthi etc. (simple interrupted, continuous, mattress, etc.).
  - Ensure each knot is secure and that tension is appropriate to avoid tissue strangulation.

3. **Knots Procedure:**
   - **Types of Knots:**
     - Teach students various types of surgical knots (square knot, surgeon's knot, etc.).
   - **Practice:**
     - Have students practice tying knots with different techniques and materials.
     - Emphasize the importance of secure, reliable knots in preventing wound complications.
4. **Minor Surgical Procedures:**
   - **Incision and Drainage:**
     - Perform minor procedures like incision and drainage under supervision.
     - Emphasize aseptic techniques and patient safety.
   - **Biopsy:**
     - Teach students how to perform minor biopsies, including handling and preserving tissue samples.
5. **Post-Procedure Care:**
   - Remove sutures if applicable, following proper timing and technique.
   - Apply a sterile dressing and provide wound care instructions to the patient or simulation.
6. **Student Practice:**
   - Allow students to practice the procedures on simulators or under the supervision of patients.
   - Provide immediate feedback and guidance to ensure proper technique and confidence.

Topic 7 Yogya (Experimental Surgical Training) (LH :1 NLHT: 0 NLHP: 8)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO1, CO3, CO5	Appreciate the importance of simulation based teaching in surgical practice (Yogya Vidhi)	CK	MK	K	L&PPT ,L&GD, L	P-EXAM,DEB,PRN,QZ ,PP-Practical	F&S	I	-	LH
CO1, CO2, CO4, CO5, CO6	Demonstrate the necessary skills and knowledge to perform catheterization safely and effectively on patients	PSY-GUD	MK	KH	PT,D-M ,D,SDL, L_VC	P-RP,PP-Practical,DOPS,CHK,M-MOD	F&S	I	-	NLHP7.1
CO1, CO2, CO6	Demonstrate the essential skills of performing IM and IV cannulation, as well as intradermal and subcutaneous injections	PSY-GUD	MK	KH	W,CBL, PT,SDL ,SIM	PRN,PP-Practical,DOPS,P-CASE, P-VIVA	F&S	I	-	NLHP7.2
CO1, CO2, CO4, CO6	Demonstrate the practical skills necessary to perform the insertion of Ryle's tube, ensuring proficiency and patient safety.	PSY-GUD	MK	KH	PT,L_VC,D,D-BED,W	P-EXAM,DOPS,P-REC,P-MOD, P-PRF	F&S	I	-	NLHP7.3
CO1, CO2, CO4, CO6	Explain indications for surgical drain insertion along with the proper technique for surgical drain insertion.Describe post-operative care for surgical drains.	CC	MK	KH	SIM,KL ,D,L_VC,TUT	VV-Viva,P-PRF,DOPS, P-VIVA,SP	F&S	I	-	NLHP7.4

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity

Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 7.1	Catheterization -Hands-on training on Simulators	**Steps:** 1. **Preparation:** • Gather all required equipment (catheters, lubricants, antiseptic solutions, gloves, sterile drapes, etc.). • Educate students on the indications, contraindications, and potential complications of catheterization. 2. **Catheterization Procedure:** • **Patient Preparation:** ◦ Explain the procedure to the patient and obtain informed consent. ◦ Position the patient comfortably and ensure privacy. ◦ Clean the genital area with an antiseptic solution to reduce infection risk. • **Insertion of Catheter:** ◦ Choose the appropriate size and type of catheter. ◦ Lubricate the catheter tip generously. ◦ Gently insert the catheter into the urethra, guiding it towards the bladder. ◦ Ensure urine flow into the catheter before inflating the balloon (if using a Foley catheter). ◦ Secure the catheter in place and attach the drainage bag. • **Post-Insertion Care:** ◦ Secure the catheter tubing to prevent accidental dislodgment. ◦ Monitor the patient for any discomfort or complications. ◦ Educate the patient on catheter care and signs of potential issues. 3. **Catheter Removal:** • Deflate the balloon (if using a Foley catheter). • Gently withdraw the catheter, ensuring minimal discomfort to the patient. • Inspect the catheter for any abnormalities or signs of infection.

		4. **Post-Procedure Care:** • Clean the area around the urethra. • Provide instructions on hydration and hygiene. • Monitor the patient for any immediate complications. 5. **Student Practice:** • Allow students to practice the procedure on simulators or under the supervision of patients. • Provide constructive feedback and guidance to ensure correct technique and patient safety.
NLHP 7.2	IV canulation, IM / IV / Subcutaneous / Intradermal Injection	**Steps:** 1. **Preparation:** • Collect all necessary equipment (needles, syringes, cannulas, antiseptic solutions, gloves, sterile drapes, etc.). • Educate students on the indications, contraindications, and potential complications of each procedure. 2. **IM (Intramuscular) Injection:** • **Site Selection:** ◦ Choose the appropriate muscle (deltoid, gluteus, vastus lateralis, etc.). • **Preparation:** ◦ Clean the injection site with an antiseptic solution. ◦ Prepare the syringe and needle with the prescribed medication. • **Injection:** ◦ Insert the needle at a 90/45degree angle. ◦ Aspirate to ensure the needle is not in a blood vessel. ◦ Inject the medication slowly and steadily. ◦ Remove the needle and apply a sterile dressing. 3. **IV (Intravenous) Cannulation:** • **Site Selection:** ◦ Identify a suitable vein, typically in the forearm or hand.

- **Preparation:**
    - Clean the site with an antiseptic solution.
    - Apply a tourniquet to engorge the vein.
- **Cannulation:**
    - Insert the cannula at a shallow angle, ensuring blood flashback.
    - Advance the cannula into the vein and remove the needle.
    - Secure the cannula and attach the IV line or cap.

4. **Intradermal Injection:**
    - **Site Selection:**
        - Typically performed on the forearm or upper back.
    - **Preparation:**
        - Clean the site with an antiseptic solution.
        - Prepare the syringe with a fine needle and the prescribed substance.
    - **Injection:**
        - Insert the needle at a 10-15 degree angle, just under the skin.
        - Inject a small amount of the substance, forming a small bleb.
        - Remove the needle and avoid massaging the area.
5. **Subcutaneous Injection:**
    - **Site Selection:**
        - Common sites include the abdomen, thigh, or upper arm.
    - **Preparation:**
        - Clean the site with an antiseptic solution.
        - Prepare the syringe and needle with the prescribed medication.
    - **Injection:**
        - Pinch the skin to create a subcutaneous fold.
        - Insert the needle at a 45-degree angle.
        - Inject the medication slowly and steadily.
        - Remove the needle and apply a sterile dressing.
6. **Post-Procedure Care:**
    - Monitor the patient for any immediate adverse reactions.
    - Provide instructions on care and potential side effects.
7. **Student Practice:**

		• Allow students to practice the procedures on simulators or under the supervision of patients. • Provide constructive feedback and guidance to ensure correct technique and patient safety.
NLHP 7.3	Hands On Training- Ryle's tube Insertion	**Steps:** 1. **Preparation:** • Gather all necessary equipment (Ryle's tube, lubricants, antiseptic solutions, gloves, sterile drapes, etc.). • Educate students on the indications, contraindications, and potential complications of each procedure. 2. **Ryle's Tube Insertion:** • **Patient Preparation:** ◦ Explain the procedure to the patient and obtain informed consent. ◦ Position the patient in a semi-upright position. ◦ Clean the nostril with an antiseptic solution. • **Insertion Procedure:** ◦ Lubricate the tip of Ryle's tube ◦ Gently insert the tube through the nostril, directing it downwards and backward. ◦ Encourage the patient to swallow to facilitate passage of the tube into the stomach. ◦ Verify the position of the tube by aspirating stomach contents or injecting air and listening with a stethoscope. Secure the tube to the patient's nose with adhesive tape. **3. Removal of Ryle's tube :** ◦ Explain the procedure to patients

		◦ Remove slowly & smoothly using an aseptic technique. Clean the surrounding area 1. **Post-Procedure Care:** • Monitor the patient for any immediate complications. • Ensure the tubes and drains are functioning correctly. • Provide instructions on care and monitoring of the tubes
NLHP 7.4	Hands-on training -Drains	**Steps for Surgical Drain Insertion:** Pre-Insertion 1. Assess the patient's need for a surgical drain. 2. Choose the appropriate drain type (e.g., Penrose, Jackson-Pratt). 3. Prepare equipment and sterile field. Insertion 1. Make a small incision (1-2 cm) at desired site. 2. Bluntly dissect tissue to create a tract. 3. Insert drain through the tract, ensuring proper placement. 4. Secure the drain with sutures or staples. Post-Insertion 1. Connect the drain to the collection device. 2. Document drain insertion and patient's response. 3. Provide post-operative care and instructions. Potential Complications: 1. Infection 2. Hemorrhage 3. Damage to surrounding structures 4. Drain occlusion or malfunction Post-Operative Care: 1. Monitor drain output and adjust as needed.

		2. Maintain drain patency. 3. Provide wound care. 4. Remove the drain when indicated.

Topic 8 Marma (Vital points) (LH :2 NLHT: 0 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO7	Explain Marma-Nirukti and the classifications of Marma in detail.Explain Individual Marma Viddhalakshana.	CC	MK	K	L&GD, L,L&PPT	DOPS,VV-Viva,DOPS ,QZ ,P-EXAM	F&S	I	-	LH
CO1, CO6, CO7	Explain Marmaghata chikitsa and its surgical importance	CC	MK	K	L&GD, D,L&PPT ,L_VC,PER	VV-Viva,PP-Practical, T-CS,CBA, P-EXAM	F&S	I	-	LH
CO1, CO3, CO7	Identify Marma points and their manipulation techniques for treating musculoskeletal disorders (Frozen shoulder, tennis elbow, intervertebral disc prolapse, cervical spondylosis) and sports injuries.	CC	DK	KH	D-M,L &PPT , W,SIM, PT	PP-Practical,P-EXAM, P-CASE,P-VIVA,DEB	F&S	I	-	NLHP8.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 8.1	Marma identification and manipulation techniques in musculoskeletal disorders and Sports injuries	**Steps:**

1. **Preparation:**
    - Gather necessary materials (anatomical charts, markers, massage oils, gloves, etc.).
    - Brief students on the significance of Marma points and their role in Ayurveda for musculoskeletal and sports-related conditions.
2. **Identification of Marma Points:**
    - **Frozen Shoulder:**
        - Locate the vital Marma points around the shoulder girdle, such as Amsa Marma.
    - **Tennis Elbow:**
        - Identify Marma points around the elbow region, focusing on Kurpara Marma.
    - **Intervertebral Disc Prolapse:**
        - Determine the Marma points along the spine, particularly Kati and Pristha Marma.
    - **Cervical Spondylosis:**
        - Pinpoint Marma points in the neck region, including Griva Marma.
    - **Sports Injuries:**
        - Identify relevant Marma points specific to the injury location, ensuring a holistic approach to treatment.
3. **Manipulation Techniques:**
    - **Massage Techniques:**
        - Apply gentle pressure and circular motions on the identified Marma points using massage oils.
        - Demonstrate various massage strokes that stimulate blood flow and reduce inflammation.
    - **Pressure Application:**
        - Teach students how to apply the right amount of pressure on Marma points without causing discomfort.
        - Emphasize the importance of patient feedback during manipulation.
    - **Stretching and Mobilization:**
        - Combine Marma point manipulation with gentle stretching and joint mobilization exercises.
        - Focus on improving range of motion and reducing muscle tension.

		4. **Practical Demonstration:** • Allow students to practice Marma point identification and manipulation techniques on simulators or peers. • Supervise and provide feedback on their technique and approach. 5. **Post-Procedure Care:** • Advice on post-manipulation care, including rest, hydration, and gentle exercises. • Monitor for any immediate adverse reactions or discomfort.

Topic 9 Kshara Karma (LH :2 NLHT: 2 NLHP: 4)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO2, CO5	Describe Nirukti, Pradhanyata, Guna, Dosha, Karma, Prakara of KsharaExplain Arhata, Anarhata, Pradhan karma, Upadrava, and Chikitsa of Ksharkarma	CK	MK	K	L,L&PPT	PRN,P-ID, P-VIVA,INT,PP-Practical	F&S	I	-	LH
CO1, CO2	Describe the clinical application of Ksharasutra, Kshara Pratisaran, Ksharataila, Ksharavarti, and Ksharodaka in different surgical conditions.	CK	MK	K	L,L_VC,L&PPT	P-EXAM,P-PRF,T-CS, PP-Practical,VV-Viva	F&S	I	V-RS,V-RS	LH
CO1, CO2, CO7	Appraise and demonstrate Kshar and Ksharsutra preparation along with its application in Ayurveda	CE	MK	KH	D,TUT, L&PPT ,CBL,DIS	CL-PR,P-EXAM,VV-Viva,PP-Practical,INT	F&S	I	-	NLHT9.1
CO1, CO2, CO4, CO7	Describe the proper handling and care of a patient undergoing Kshrasutra therapy and the importance of sterile techniques during Kshrasutra changing.	CE	MK	KH	L_VC,SIM,TUT ,D	DOPS,PRN ,QZ ,T-CS,P-PRF	F&S	I	-	NLHT9.2
CO1, CO2,	Appraise the concepts and indications of Ksharodaka, Kshartaila, Ksharvarti, and Ksharpichu, including their preparation methods,	CE	MK	KH	L_VC,FC,TUT,	DOPS,PRN ,P-VIVA,V	F&S	I	V-RS,V-RS	NLHP9.1

CO4, CO7	uses, dosages, and application techniques.				TBL,D	V-Viva,P-EXAM				
CO1, CO2, CO4, CO7	Elaborate on the concept and technique of Kshar Karma in Anorectal disorders.	CC	MK	KH	D,SIM, D-BED, TUT,PT	P-VIVA, C-VC,T-CS,P P-Practical	F&S	I	-	NLHP9.2

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 9.1	Demonstration of Kshar & Kshara Sutra – Preparation, and Method of Application	Kshar : Activities: 1. Lecture: Introduction to Kshar, its history, and principles. 2. Demonstration: Preparation of Kshar using different materials (e.g., Apamarga, Ark). 3. Hands-on training: Students prepare Kshar under supervision. 4. Discussion: Quality control measures, safety precautions, and storage. 5. Practical exercise: Identify and analyze different types of Kshar. Ksharsutra : Activities: 1. Lecture: Introduction to Ksharsutra, its history, and principles. 2. Demonstration: Preparation of Ksharsutra using different threads (e.g., Snuhi, Apamarga). 3. Hands-on training: Students prepare Ksharsutra under supervision. 4. Discussion: Thread selection, preparation, and quality control. 5. Practical exercise: Apply Ksharsutra on a dummy model Common Activities: 1. Visit to a pharmacy or manufacturing unit. 2. Interaction with experts in Kshar and Ksharsutra preparation. 3. Group discussion: Case studies, indications, contraindications. 4. Written examination: Theory and practical application.
NLHT 9.2	Ksharsutra changing	**Steps-**

		Pre-Demonstration 1. Lecture: Overview of Kshrasutra therapy, indications, and contraindications. 2. Review of patient selection and preparation. 3. Discussion of necessary equipment and materials. Demonstration 1. Patient positioning and draping. 2. Sterile technique demonstration. 3. Kshrasutra removal and inspection. 4. Cleaning and preparation of the site. 5. Re-insertion of new Kshrasutra. 6. Securement and dressing application. 7. Patient education and post-procedure instructions. Post-Demonstration 1. Discussion: Common challenges and complications. 2. Hands-on practice: Students practice Kshrasutra changing under supervision. 3. Debriefing: Review of key takeaways and Q&A. Key Takeaways: 1. Maintain sterile technique throughout the procedure. 2. Ensure proper patient positioning and draping. 3. Inspect the Kshrasutra and site before removal. 4. Clean and prepare the site thoroughly. 5. Re-insert the new Kshrasutra with precision. 6. Secure and dress the site properly. 7. Provide clear patient education and post-procedure instructions. 8. Monitor for potential complications.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 9.1	Application of Ksharodaka, Kshartaila,	**Steps -**

	Ksharvarti, Ksharpichu in Dushtavrana	1. Demonstration: Preparation of Ksharodaka, Kshartaila, Ksharvarti, and Ksharpichu. 2. Hands-on training: Application techniques. 3. Practice: Students apply therapies under supervision. 4. Group discussion: Challenges and solutions. **Key Points:** 1. Ksharodaka: Liquid Kshar for wound cleansing. 2. Kshartaila: Medicated oil for wound healing. 3. Ksharvarti: Kshar impregnated thread for wound closure. 4. Ksharpichu: Kshar-soaked cotton swab for wound cleaning.
NLHP 9.2	Demonstration and Hands-on training of Kshar karma in Anorectal disorders (Arsha, Bhagandara, Nadivrana)	**Steps -** Practical 1. Demonstration: Preparation of Kshar for Arsha, Bhagandara, and Nadivrana. 2. Hands-on training: Application techniques for Kshar Karma. 3. Practice: Students apply Kshar Karma under supervision. 4. Group discussion: Challenges and solutions. Clinical 1. Live patient demonstration: Kshar Karma application. 2. Observational learning: Students observe expert application. 3. Interactive session: Q&A and discussion.

Topic 10 Agnikarma (LH :2 NLHT: 0 NLHP: 4)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO4, CO5	Describe the Mahatva, Upakarana, Vidhi, Akrutibheda, Yogya, Ayogya, and Upadrava Chikitsa of Agnikarma.	CK	MK	KH	L,DIS,D ,L&PPT	P-MOD,Log book,M-CHT,CBA, C-VC	F&S	I	-	LH

CO1, CO2, CO4	Explain Pramad Dagdha, Dhumopahat & Ushna vatatatap dagdha lakshan & Chikitsa	CK	MK	KH	PER,L, L_VC,L &PPT	PM,PRN,C L-PR, C-VC,P-REC	F&S	I	-	LH
CO1, CO2, CO4, CO7	Discuss practical skills in performing Agnikarma for pain management in Gridhrasi (sciatica) and Avabhavuka (neuralgia).	CC	MK	KH	D,PrBL, D-M,D-BED,D L	VV-Viva,P-EXAM,P-SUR,P-VIVA,SP	F&S	I	-	NLHP10.1
CO1, CO2, CO4, CO7	Discuss practical skills in performing Agnikarma for the management of surgical diseases such as Arsha (Hemorrhoids) and Charmakeel (warts).	CC	MK	KH	PT,SIM, L&GD, D-M	VV-Viva,P-PRF,PP-Practical,P-CASE,M-MOD	F&S	I	-	NLHP10.2

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 10.1	Hands-on experience with Agnikarma in the pain management of any one disease (Gridhrasi, Avabahuka, etc)	**Preparation Steps:** Patient History and Assessment 1. Collect detailed patient history, including the onset, duration, and nature of pain. Document any previous treatments and their outcomes. 2. Physical Examination: Perform a thorough examination to assess the affected area, noting any tenderness, swelling, or restricted movement. 3. Informed Consent: Explain the Agnikarma procedure to the patient, including its benefits and potential risks, and obtain informed consent. 4. Equipment Setup: Prepare the necessary equipment, including the Agnikarma instrument

		Agnikarma Procedure 1. Sterilization: Sterilize the Shalaka and the area to be treated. 2. Application of Heat: Heat the Shalaka until it becomes red-hot. 3. Application to the Skin: Gently touch the heated Shalaka to the skin over the affected area, creating a small burn1. Repeat this process as needed to ensure minimal discomfort to the patient. 4. Post-procedure Care: Apply a soothing ointment and cover the treated area with a sterile dressing. Provide post-procedure care instructions to the patient. Hands-on Practice with Simulators 1. Simulator Setup: Use a simulator to practice the Agnikarma technique, ensuring participants become familiar with the procedure and handling of the equipment. 2. Practice Sessions: Allow participants to practice the Agnikarma technique on the simulator, focusing on precision and minimizing discomfort. 3. Feedback and Debriefing: Provide constructive feedback and conduct a debriefing session to discuss findings and areas for improvement.
NLHP 10.2	Demonstration of Agnikarma in the management of any one surgical disease (Arsha, Charmakeel, etc)	**Preparation Steps:** Patient History and Assessment 1. Gather History: Collect detailed patient history, including the onset, duration, and nature of the condition. Document any previous treatments and their outcomes. 2. Physical Examination: Perform a thorough examination to assess the affected area, noting the size, location, and characteristics of the lesions**.** **Preparation for Agnikarma**

1. Informed Consent: Explain the Agnikarma procedure to the patient, including its benefits and potential risks, and obtain informed consent.
2. Equipment Setup: Prepare the necessary equipment, including the Agnikarma instrument (Shalaka), a heat source (e.g., flame), and sterile materials.
3. Patient Positioning: Position the patient comfortably, ensuring easy access to the affected area.

Agnikarma Procedure

1. Sterilization: Sterilize the Shalaka and the area to be treated.
2. Application of Heat: Heat the Shalaka until it becomes red-hot.
3. Application to the Skin: Gently touch the heated Shalaka to the lesions on the affected area for a fraction of a second or as required. Repeat this process as needed, ensuring minimal discomfort to the patient.
4. Post-Procedure Care: Apply Ghrit Kumari pulp over the treated area, and cover it with a sterile dressing. Provide postprocedure care instructions to the patient.

Hands-on Practice with Simulators

1. Simulator Setup: Use a simulator to practice the Agnikarma technique, ensuring participants become familiar with the procedure and handling of the equipment.
2. Practice Sessions: Allow participants to practice the Agnikarma technique on the simulator, focusing on precision and minimizing discomfort.

Topic 11 Raktamokshana (LH :3 NLHT: 0 NLHP: 6)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO2, CO4	**Describe** Raktamokshana Mahatva and Prakara of Siravedha,	CK	MK	KH	L&PPT ,L	T-CS,CL-PR	F&S	I	-	LH

CO1, CO2, CO4	Explain Pracchanna, Shringa, Alabu procedure, Yogya, Ayogya, Upadrava and Chikitsa.	CK	MK	KH	L&PPT ,L	Log book,CL-PR,T-CS	F&S	I	-	LH
CO1, CO2, CO4	Explain Jaloukavacharana - Yogya, Ayogya, Procedure, Upadrava and Chikitsa.	CK	MK	KH	L&PPT ,L	T-CS,CL-PR	F&S	I	-	LH
CO1, CO2, CO4, CO7	Describe siravedha (venesection) with its indications, techniques, and therapeutic benefits for disease-modifying management of conditions such as Gridhrasi (sciatica) and Uttan Vatarakta (acute gout).	CC	MK	KH	PT,D-M ,W,SIM, L&PPT	P-PRF,P-EXAM,M-CHT,SP,P-VIVA	F&S	I	-	NLHP11.1
CO1, CO2, CO4, CO7	Explain the Alabu (cupping) procedure along with its indications, techniques, and therapeutic benefits for disease-modifying management of conditions such as Kati-graha (lower back stiffness) and Manya-graha (neck stiffness).	CC	MK	KH	PT,L&PPT ,SIM ,D-M	P-POS,P-CASE,P-VIVA,M-MOD, P-EXAM	F&S	I	-	NLHP11.2
CO1, CO2, CO4, CO7	Discuss Jaloukavacharana (Leech therapy) along with its indications, techniques, and therapeutic benefits for disease-modifying management of conditions like Vidhradi (abscess) and Kushta (skin disorders).	CC	MK	KH	SIM,D-M,PT,L &PPT	P-RP,PM,P-CASE,P-MOD,RK	F&S	I	-	NLHP11.3

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 11.1	Siravedha in the management of any one surgical disease (Grudhrasi, Uttan Vatarakta, etc)	**Preparation Steps:** **Patient History and Assessment**

1. Gather History: Collect detailed patient history, including the onset, duration, and nature of symptoms. Document any previous treatments and their outcomes.
2. Physical Examination: Perform a thorough examination to assess the affected area, noting any tenderness, swelling, or restricted movement.

Preparation for Siravedha

1. Informed Consent: Explain the Siravedha procedure to the patient, including its benefits and potential risks, and obtain informed consent.
2. Equipment Setup: Prepare the necessary equipment, including a sterile lancet or needle, a tourniquet, antiseptic solution, and sterile dressings.
3. Patient Positioning: Position the patient comfortably, ensuring easy access to the selected venesection site.

Siravedha Procedure

1. Sterilization: Clean the selected site with an antiseptic solution.
2. Application of Tourniquet: Apply a tourniquet above the selected site to engorge the veins.
3. Venesection: Use a sterile lancet or needle to puncture the vein, allowing a controlled amount of blood to flow out. Monitor the patient closely during the procedure.
4. Post-Procedure Care: Remove the tourniquet, apply pressure to the site, and cover it with a sterile dressing. Provide post-procedure care instructions to the patient.

Hands-on Practice with Simulators

1. Simulator Setup: Use a simulator to practice the Siravedha technique, ensuring participants become familiar with the procedure and handling of the equipment.
2. Practice Sessions: Allow participants to practice the Siravedha technique on the simulator,

		focusing on precision and minimizing discomfort. 3. Feedback and Debriefing: Provide constructive feedback and conduct a debriefing session to discuss findings and areas for improvement.
NLHP 11.2	Alabu (cupping) procedure in the management of any one surgical disease (Kati Graham, Manya Graha, etc)	**Preparation Steps:** **Patient History and Assessment** 1. Gather History: Collect detailed patient history, including the onset, duration, and nature of symptoms. Document any previous treatments and their outcomes. 2. Physical Examination: Perform a thorough examination to assess the affected area, noting any tenderness, stiffness, or restricted movement. Preparation for Alabu 1. Informed Consent: Explain the Alabu procedure to the patient, including its benefits and potential risks, and obtain informed consent. 2. Equipment Setup: Prepare the necessary equipment, including cupping glasses, a heat source, antiseptic solution, and sterile materials. 3. Patient Positioning: Position the patient comfortably, ensuring easy access to the affected area. Alabu Procedure 1. Sterilization: Clean the selected site with antiseptic solution. 2. Heating the Cupping Glasses: Heat the inside of the cupping glasses using a flame to create a vacuum.

		3. Application to the Skin: Quickly place the heated cupping glasses on the affected area, allowing the vacuum to draw the skin into the glass. This enhances blood flow and alleviates stiffness. 4. Duration: Leave the cupping glasses in place for about 10-15 minutes, monitoring the patient for any discomfort. 5. Removal: Gently remove the cupping glasses and clean the treated area. Apply a soothing Taila / Lepa / Ghrit-kumari pulp. Hands-on Practice with Simulators 1. Simulator Setup: Use a simulator to practice the Alabu technique, ensuring participants become familiar with the procedure and handling of the equipment. 2. Practice Sessions: Allow participants to practice the Alabu technique on the simulator, focusing on precision and patient comfort. 3. Feedback and Debriefing: Provide constructive feedback and conduct a debriefing session to discuss findings and areas for improvement.
NLHP 11.3	Jaloukavcharana (Leech Therapy) in the management of any one surgical disease (Vidradhi, Dushtavrana, Koth, etc)	**Preparation Steps:** Patient History and Assessment 1. Gather History: Collect detailed patient history, including the onset, duration, and nature of symptoms. Document any previous treatments and their outcomes. 2. Physical Examination: Perform a thorough examination to assess the affected area, noting any signs of inflammation, infection, or skin changes. Preparation for Jaloukavacharana 1. Informed Consent: Explain the Jaloukavacharana procedure to the patient, including its benefits and potential risks, and obtain informed consent.

		2. Equipment Setup: Prepare the necessary equipment, including medicinal Leeches, antiseptic solution, and sterile materials. 3. Patient Positioning: Position the patient comfortably, ensuring easy access to the affected area. Jaloukavacharana Procedure 1. Sterilization: Clean the selected site to make it sterile. 2. Application of Leeches: Gently place medicinal Leech on the affected area, ensuring they attach properly. Leech begins to suck blood. 3. Duration: Allow the Leech to remain attached until they detach naturally, or if pricking pain / itching starts. 4. Post-Procedure Care: Remove the Leech and sprinkle Haridra powder over the treated area. Apply a sterile dressing. Provide post-procedure care instructions to the patient, including monitoring for any signs of infection. Hands-on Practice with Simulators 1. Simulator Setup: Use a simulator to practice the Jaloukavacharana technique, ensuring participants become familiar with the procedure and handling of the equipment. 2. Practice Sessions: Allow participants to practice the Jaloukavacharana technique on the simulator, focusing on precision and patient comfort. 3. Feedback and Debriefing: Provide constructive feedback and conduct a debriefing session to discuss findings and areas for improvement.

Topic 12 Bandha Vidhi (LH :1 NLHT: 1 NLHP: 4)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**

CO1, CO4, CO5	Describe BandhaVidhi – Prayojana, Dravya (Pichu, Plota, Kavalika, and Vikeshika), Yogya, Ayogya, Prakara and Upadrava	CK	MK	KH	L&PPT ,L_VC, L	Log book,P RN,CL-PR	F&S	I	-	LH
CO1, CO2, CO4, CO5	Analyze Ayurvedic and modern splinting techniques, materials, and applications while integrating evidence-based practice for optimized injury management.	PSY-MEC	DK	KH	L&PPT ,L	PRN,P-MO D,P-PRF,C L-PR,P-RP	F&S	I	-	NLHT12.1
CO1, CO2, CO4	Demonstrate modern techniques of bandaging for different types of wounds and injuries. Enhance participants' confidence and proficiency in basic surgical and bandaging skills through hands-on training.	PSY-ORG	MK	SH	D-M,D,PT	M-CHT,P-EXAM,P-POS,M-POS, M-MOD	F&S	I	-	NLHP12.1
CO1, CO3, CO5	Demonstrate skills in bandaging in safely transporting injured patients using various techniques.	PSY-GUD	DK	KH	D,D-M,PT	P-RP,P-MO D,P-PRF	F&S	I	-	NLHP12.2

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 12.1	Training of Bandaging on Simulators with relevant modern techniques	Practical Activities 1. **Patient Demonstrations:** ◦ Demonstrate splint application on patients with different types of injuries. ◦ Highlight the differences and similarities between Ayurvedic and modern splinting techniques. ◦ **Role-Playing:**

		▪ Create role-playing scenarios where participants can practice diagnosing injuries and applying appropriate splints. ▪ Encourage feedback and discussion to improve techniques and understanding.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 12.1	Perform training of Bandaging on Simulators with relevant modern techniques	**Preparation Steps:** **Patient History and Assessment** 1. Gather History: Collect detailed patient history relevant to the surgical procedure and injury. 2. Physical Examination: Perform a thorough examination to assess the affected area, noting any signs of infection, inflammation, or other complications. **Preparation for Surgical Skills Training** 1. Informed Consent: Explain the procedure and training objectives to the participants. 2. Equipment Setup: Prepare the necessary equipment, including surgical instruments, sterile gloves, antiseptic solution, bandages, and simulators. 3. Participant Positioning: Ensure participants are comfortably positioned to perform the surgical skills and bandaging techniques. **Basic Surgical Skills Training** 1. **Hemostasis:**

		• Technique: Demonstrate methods for achieving hemostasis by adequate pressure bandaging. • Hands on Practice Allow participants to practice hemostasis techniques on simulators. • Feedback: Provide constructive feedback on effectiveness and safety. **Modern Bandaging Techniques** 1. Types of Bandages: • Demonstration: Show different types of bandage and their appropriate uses. • Hands-on Practice: Allow participants to practice applying various bandages on simulators. 2. Specialized Bandaging Techniques: • Hands-on Practice: Allow participants to practice compression bandaging on simulators. 3. Immobilization Bandaging: • Splinting and Immobilization: Demonstrate the application of splints and immobilization bandages for fractures or joint injuries. • Hands-on Practice: Allow participants to practice splinting and immobilization techniques on simulators. **Recapitulation:** Mastering basic surgical skills and modern bandaging techniques is essential for effective patient care. Hands-on practice with simulators enhances proficiency and confidence in these skills.
NLHP 12.2	Demonstration of the Transportation of injured patients (Double Human Crutch, Fireman's Lift, Two-handed Seat, etc) & Recovery Position	**Preparation Steps:** **Patient Transportation Techniques**

1. Double Human Crutch
    - Objective: Provide support to a patient who can partially bear weight but needs assistance walking.
    - Preparation: Ensure the patient is calm and inform them about the procedure.
    - Steps:
        a. Position yourself and another person on either side of the patient.
        b. Have the patient place their arms around your shoulders.
        c. Support the patient by holding them firmly around their waist or hips.
        d. Move together in a coordinated manner, with the patient taking small steps.
2. Fireman’s Lift
    - Objective: Transport an unconscious or severely injured patient over a short distance.
    - Preparation: Check the patient's responsiveness and ensure the scene is safe.
    - Steps:
        a. Lift the patient's arms and place them over your shoulders.
        b. Bend down, grasp the patient's wrist, and pull them across your shoulders.
        c. Stand up, balancing the patient’s weight evenly.
        d. Walk carefully to the desired location, ensuring the patient’s airway remains clear.
3. Two-Handed Seat
    - Objective: Provide a stable seat for an injured patient who cannot walk but can sit upright.
    - Preparation: Communicate with the patient and ensure they are ready for the move.
    - Steps:
        a. Sit the patient on the ground.
        b. Have one person stand on either side of the patient.
        c. Each person grabs their own wrist and the other's wrist, forming a seat.
        d. Lift the patient onto the seat by pulling them upwards.
        e. Move in unison to transport the patient.

Recovery Position

		1. Objective: Position an unconscious but breathing patient safely to maintain an open airway and prevent aspiration. 2. Preparation: Ensure the patient is breathing and check for any life-threatening injuries. 3. **Steps:** a. Kneel beside the patient. b. Extend the patient's arm nearest to you at a right angle to their body, with the palm facing up. c. Place the other arm across their chest, with the back of their hand against their cheek. d. Bend the knee farthest from you to a right angle. e. Carefully roll the patient onto their side by pulling on the bent knee. f. Adjust the top leg so that both the hip and knee are bent at right angles. g. Tilt the patient's head back to ensure an open airway and monitor their breathing.

Topic 13 Pranashta Shalya (LH :1 NLHT: 0 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO2, CO4	Describe Pranashta Shalya and NirharanaUpaya (Identification & Principles of management).	CK	MK	KH	L_VC,PER,L&PPT ,L	INT,T-CS,CL-PR,C-VC,Log book	F&S	I	-	LH
CO1, CO3, CO5	Perform skills of the Heimlich maneuver effectively along with the indications and techniques for relieving choking.	PSY-MEC	NK	SH	TBL,RP,W,PrBL	P-PRF,P-MOD,P-VIVA	F&S	I	-	NLHP13.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 13.1	Heimlich maneuver- Hands-on training (Choking)	**Preparation Steps:** **Understanding Choking** 1. Recognize Signs of Choking: • Inability to speak or breathe • Coughing or gagging • Clutching the throat (universal choking sign) • Cyanosis (bluish skin color) **Preparation for Heimlich Maneuver** 1. Equipment Setup: Use a simulator designed for practicing the Heimlich maneuver. 2. Participant Positioning: Ensure participants are comfortably positioned to perform the maneuver on the simulator. **Hands-on Practice with Simulators:** **Heimlich Maneuver Procedure** • Stand Behind the Person: Position yourself behind the choking person. • Make a Fist: Place your fist just above the person's navel (belly button). • Grasp Your Fist: With your other hand, grasp your fist. • Perform Abdominal Thrusts: Deliver quick, upward thrusts into the person's abdomen. Repeat until the object is expelled or the person becomes unconscious.

Topic 14 Fluid, Electrolyte, Acid Base Balance and Nutrition in surgical practice (LH :3 NLHT: 1 NLHP: 4)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO1, CO2, CO4, CO5	Explain the physiology of fluids and electrolytes and Dehydration and over Hydration	CK	MK	KH	L_VC,L &PPT ,L	CL-PR,PM, C-VC,T-CS	F&S	I	-	LH
CO1, CO2, CO3, CO4	Describe Specific electrolyte loss,Acidosis, Alkalosis, Symptomatology and Management	CK	DK	K	PER,L, L&PPT ,L_VC	CL-PR, C-VC,PM,T-CS,PRN	F&S	I	-	LH
CO1, CO3, CO4, CO5	Describe the Parental Nutrition.	CK	MK	K	L,L&PPT ,L_VC	T-CS,Log book,CL-PR, C-VC	F&S	I	-	LH
CO1, CO2, CO3, CO4	Evaluate electrolyte imbalances by identifying clinical manifestations, analyzing their systemic effects, and formulating appropriate management strategies for restoration.	CS	DK	KH	L_VC,PBL,DIS, L&GD	P-PS,PM,P-EXAM,P-CASE,P-PRF	F&S	I	-	NLHT14.1
CO1, CO3, CO6	Critically evaluate fluid therapy selection by calculating requirements based on physiological needs and clinical decision-making in conditions like dehydration, shock, and burns.	CE	DK	KH	PT,L&PPT ,L,RP	P-EXAM,P-RP,P-PS,P-VIVA,P-CASE	F&S	I	-	NLHP14.1
CO1, CO3, CO6	Integrate knowledge of physiological mechanisms and clinical implications to assess, diagnose, and manage acid-base imbalances using arterial blood gas (ABG) analysis and targeted interventions.	CC	DK	KH	PT,PBL ,CD,L_VC,D	P-PS,P-EXAM,P-VIVA,P-MOD	F&S	I	-	NLHP14.2

Non Lecture Hour Theory		
S.No	**Name of Activity**	**Description of Theory Activity**
NLHT 14.1	Electrolyte loss	Present real-life scenarios of patients with electrolyte imbalance. Assign students topics like "Importance of Sodium" or "Dangers of Potassium Deficiency." Electrolyte imbalance role-play: Divide students into patient and healthcare provider roles. Electrolyte solution preparation: Have students prepare electrolyte solutions.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 14.1	Calculations & selections of fluids in various conditions like Dehydration, Shock& Burns	**Preparation Steps:** **Understanding Fluid Therapy** 1. **Types of Fluids:** • Crystalloids: Normal saline, Ringer's lactate, D5W (5% dextrose in water). • Colloids: Albumin, Dextran, etc. 2. **Indications:** • Dehydration: Assess severity (mild, moderate, severe) to determine fluid needs. • Shock: Differentiate between hypovolemic, cardiogenic, septic, and anaphylactic shock. • Burns: Calculate fluid requirements using formulas like the Parkland formula. **Calculation and Selection of Fluids** 1. Dehydration: • Assessment: Evaluate symptoms (dry mouth, skin turgor, hypotension, tachycardia)

and laboratory findings (serum electrolytes, BUN, S. creatinine).

- Calculation:
  - Mild: Oral rehydration solutions.
  - Moderate: IV fluids at a rate of 50-100 mL/kg over 4-6 hours.
  - Severe: Rapid IV fluids, e.g., 20 mL/kg bolus of normal saline.

2. Shock:
   - Assessment: Monitor vital signs (BP, heart rate), urine output, and perfusion status.
   - Calculation:
     - Hypovolemic shock: 20 mL/kg bolus of crystalloid, reassess and repeat as needed.
     - Septic shock: Initial 30 mL/kg of crystalloid within the first 3 hours.
     - Cardiogenic shock: Use smaller fluid boluses (250 mL) cautiously, consider inotropes.
     - Anaphylactic shock: Epinephrine first, then 1-2 L of crystalloid rapidly.
3. **Burns:**
   - Assessment: Calculate total body surface area (TBSA) burned.
   - Calculation:
     - Parkland formula: 4 mL/kg per %TBSA burned of Ringer's lactate for the first 24 hours.
     - Administer half of the total in the first 8 hours and the remaining half over the next 16 hours.

Hands-on Practice with Simulators

1. Simulator Setup: Use simulators to replicate clinical scenarios for dehydration, shock, and burns.
2. Practice Sessions: Allow participants to perform fluid calculations and administer fluids on the simulators.

NLHP 14.2	Acid Base Balance in various conditions like perforation, vomiting, etc	**Preparation Steps:** **Understanding Acid-Base Balance** 1. **Basic Concepts**: • pH, PCO2, HCO3- levels, and their normal ranges. 2. **Types of Imbalances:** • Metabolic Acidosis: Low pH, low HCO3- (e.g., due to renal failure, lactic acidosis). • Metabolic Alkalosis: High pH, high HCO3- (e.g., due to vomiting, diuretic use). • Respiratory Acidosis: Low pH, high PCO2 (e.g., due to COPD, hypoventilation). • Respiratory Alkalosis: High pH, low PCO2 (e.g., due to hyperventilation, anxiety). **Assessment and Diagnosis** 1. Patient History: • Gather detailed history relevant to the condition (e.g., history of gastrointestinal perforation, episodes of vomiting). • Document any medications or underlying medical conditions. 2. Physical Examination: • Perform a thorough physical examination to assess signs of dehydration, respiratory distress, or other relevant symptoms. 3. Laboratory Tests: • Order arterial blood gas (ABG) analysis to determine pH, PCO2, HCO3-, and other parameters. • Conduct additional tests such as serum electrolytes, blood urea nitrogen (BUN), and creatinine. **Group Discussion and Case Studies**

1. **Case Presentation**:
    - Present real-life scenarios for conditions like perforation and vomiting.
    - Discuss the initial assessment, ABG interpretation, and management plan.
2. **Interactive Discussion:**
    - Encourage participants to share their approaches and reasoning.
    - Facilitate a discussion on different strategies and best practices in managing acid-base imbalances.

Hands-on Practice with Simulators

1. Simulator Setup: Use simulators to replicate clinical scenarios of acid-base disturbances.
2. Practice Sessions: Allow participants to perform ABG interpretation and implement corrective measures on the simulators.

Topic 15 Rakta (LH :2 NLHT: 2 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO2, CO4	Describe Rakta Mahatwa, and Rakta as chuturta dosa	CK	MK	K	L_VC,PER,L&PPT ,L	CL-PR, C-VC,T-CS	F&S	I	-	LH
CO1, CO2, CO4	Explain Raktasrava , Prakara and Lakshana. along with Haemorrhage and its management	CK	MK	K	L,L&PPT ,L_VC,PER	T-CS,CL-PR,PRN	F&S	I	-	LH
CO1, CO2, CO4	Formulate comprehensive haemostasis management by evaluating bleeding and thrombotic disorders, determining intervention urgency, assessing treatment response, and optimizing long-term care strategies.	PSY-ADT	DK	KH	PT,D	SP,P-EXAM,P-VIVA	F&S	I	-	NLHT15.1
CO1, CO2,	Define blood transfusion and its indicationsAssess patients for blood transfusion needs.	PSY-GUD	MK	SH	SIM,TBL,PER,	P-CASE,P-EXAM,CL-	F&S	I	-	NLHT15.2

CO4, CO6	Explain the importance of compatibility testing. Recognize the risks and benefits of blood transfusion.				DIS,PBL	PR,PRN				

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 15.1	Describe Rakta stambhana and methodsof Haemostasis.	Simulate a patient with bleeding disorder. . Simulate a patient with thrombotic disorder. . Simulate haemostasis laboratory tests.
NLHT 15.2	Describe Blood Transfusion –Blood groups, Compatibility, Indications, Contraindications, Complications, Management. along with Component therapy	Present real-life scenarios of patients requiring blood transfusion Divide students into patient and healthcare provider roles. Have students identify and label different blood components. Simulate Blood Transfusion Reactions.

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity

Topic 16 Life Saving and Emergency Medicines in surgical practice (Prana Rakshaka and Atyayika Dravya) (LH :3 NLHT: 0 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO3, CO4, CO6, CO7	Describe Antibiotics- Classification ,Dose, Indications & Contraindications	CC	MK	K	L_VC,L	CHK,T-CS, C-VC,RK,Log book	F&S	I	-	LH

CO1, CO2, CO4, CO5, CO6	Describe Analgesics, anti-inflammatory medicines with Classification , Dose ,Indications & Contraindications	CK	MK	KH	L&PPT ,L,L_V C	PRN,CHK, CL-PR,T-CS	F&S	I	-	LH
CO1, CO2, CO4, CO5, CO6	Describe Emergency medicines**,** viz. Atropine, Adrenaline, Dopamine, Mephentine hydrochloride, Hydrocortisone, Dexamethasone, Antiemetics, Dose, Indications & Contraindications, in surgical practice.	CK	MK	K	L_VC,L ,L&PPT	CHK,PRN, T-CS,CL-PR	F&S	I	-	LH

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity

Topic 17 Naidanik Vidhi (Diagnostic techniques) (LH :2 NLHT: 0 NLHP: 6)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO3, CO4, CO5, CO6, CO7	Describe Diagnostic imaging techniques, viz. Chhaya Vikiran (X-ray), Avayava Pariksha (Ultrasonography, CAT Scan, MRI) - Principles, Method, Indications and Contraindications.	CK	MK	K	X-Ray, L&PPT ,L_VC, L	C-VC,CL-PR,T-CS,PRN	F&S	I	-	LH
CO1, CO3, CO5, CO6	Explain Biopsy / Cytological study.	CK	MK	K	L&PPT ,L,L_V C	CHK,CL-PR,T-CS, C-VC	F&S	I	-	LH

CO1, CO3, CO6	Define X-rays and their application in medical imaging and their role in diagnostic decision-making.Identify different types of X-ray examinations .	CK	MK	SH	L&PPT ,PT,X-Ray,L_VC,CD	QZ ,P-VIVA,CL-PR,P-EXAM,PP-Practical	F&S	I	-	NLHP17.1
CO1, CO3, CO5, CO6	Describe Principles and applications in medical imaging and its role in diagnostic decision-making. Recognize the limitations and contraindications of medical imaging.	CK	NK	K	D,PT,PL,RP,SIM	CL-PR,PRN,CHK	F&S	I	-	NLHP17.2
CO1, CO5, CO6	Demonstrate proficiency in biopsy procedures by selecting appropriate equipment, ensuring patient preparation, executing safe techniques, managing specimens, and identifying potential complications.	CK	NK	K	D,SIM	P-EXAM	F&S	I	-	NLHP17.3

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 17.1	Demonstration of Chhaya vikiran (X-ray) of Chest, Abdomen, Urology. and Musculoskeletal organs	**steps to learn and demonstrate Chhaya Vikiran (X-ray) of Chest, Abdomen, Urology and Musculoskeletal:** Steps to Learn and Demonstrate Chhaya Vikiran (X-ray) **Chest X-ray** **1. Normal Anatomy:** Learn to identify normal structures such as lungs, heart, mediastinum, diaphragm, and ribcage. **2. Abnormal Findings**: Recognize common abnormalities such as lung nodules, pneumonia, pleural effusion, and cardiomegaly. **3. Systematic Approach:** Develop a systematic approach to interpreting chest X-rays, including evaluating the lungs, heart, mediastinum, and diaphragm. **4. Practice:** Practice interpreting chest X-rays using online resources, textbooks, or with a radiologist.

		Abdominal X-ray **1. Normal Anatomy**: Learn to identify normal structures such as the liver, spleen, kidneys, and intestines. **2. Abnormal Findings**: Recognize common abnormalities such as kidney stones, bowel obstruction, and free air. **3. Systematic Approach**: Develop a systematic approach to interpreting abdominal X-rays, including evaluating the liver, spleen, kidneys, and intestines. **4. Practice:** Practice interpreting abdominal X-rays using online resources, textbooks, or with a radiologist. **Urology X-ray** **1. Normal Anatomy:** Learn to identify normal structures such as the kidneys, ureters, and bladder. **2. Abnormal Findings:** Recognize common abnormalities such as kidney stones, ureteral obstruction, and bladder tumors. **3. Systematic Approach:** Develop a systematic approach to interpreting urology X-rays, including evaluating the kidneys, ureters, and bladder. **4. Practice:** Practice interpreting urology X-rays using online resources, textbooks, or with a radiologist. **Musculoskeletal X-ray** **1. Normal Anatomy**: Learn to identify normal structures such as bones, joints, and soft tissues. **2. Abnormal Findings:** Recognize common abnormalities such as fractures, osteoporosis, and joint effusions. **3. Systematic Approach:** Develop a systematic approach to interpreting musculoskeletal X-rays, including evaluating bones, joints, and soft tissues. **4. Practice:** Practice interpreting musculoskeletal X-rays using online resources, textbooks, or with a radiologist.
NLHP 17.2	Avayava pariksha (CT,MRI) of Chest, abdomen, Urology bones & joints	**Steps to learn CT and MRI of Abdomen:** **Step 1: Review Patient's Clinical History and Indications** - Understand the patient's symptoms, medical history, and reasons for the CT scan - Familiarize yourself with the CT scan protocol and parameters

Step 2: Systematically Evaluate Abdominal Organs

- Liver:
  - Evaluate size, shape, and density
  - Look for lesions, cysts, or tumors
- Spleen:
  - Evaluate size and density
  - Look for lesions or infarcts
- Pancreas:
  - Evaluate size, shape, and density
  - Look for lesions, cysts, or tumors
- Kidneys:
  - Evaluate size, shape, and density
  - Look for lesions, cysts, or stones
- Gastrointestinal Tract:
  - Evaluate bowel wall thickness, density, and patency
  - Look for lesions, obstruction, or free fluid

Step 3: Evaluate Vascular and Lymphatic Structures

- Aorta and Major Branches:
  - Evaluate size, shape, and density
  - Look for aneurysms, stenosis, or dissection
- Portal and Hepatic Veins:
  - Evaluate size, shape, and density
  - Look for thrombosis or obstruction
- Lymph Nodes:
  - Evaluate size, shape, and density
  - Look for enlargement or abnormal morphology

Step 4: Look for Additional Findings

- Free Fluid or Hemorrhage:
  - Evaluate location, extent, and density
- Bone or Soft Tissue Lesions:

		- Evaluate size, shape, and density - Look for destruction or erosion **Step 5: Correlate Findings with Clinical History and Indications** - Integrate imaging findings with patient's symptoms, medical history, and laboratory results - Consider alternative diagnoses and differential diagnoses **Step 6: Document and Communicate Findings** - Clearly document imaging findings in a structured report - Communicate findings to the referring physician or radiologist **Similar to this, steps to learn CT and MRI of Chest, Urology, Bones and Joints-** **Chest** **1. CT Chest:** Show a CT scan of the chest, pointing out the lungs, heart, and major blood vessels. **2. MRI Chest**: Show an MRI scan of the chest, highlighting the mediastinum, lungs, and chest wall. **3. Normal and Abnormal Findings:** Compare normal and abnormal findings, such as lung nodules, pleural effusion, or mediastinal masses. **Urology:** **1. CT Urography:** Show a CT urogram, pointing out the kidneys, ureters, and bladder. **2. MRI Urography**: Show an MRI urogram, highlighting the kidneys, ureters, and bladder. **3. Normal and Abnormal Findings:** Compare normal and abnormal findings, such as kidney stones, ureteral obstruction, or bladder tumors. **Bones and Joints:** **1. CT Bones:** Show a CT scan of the bones, pointing out the spine, pelvis, and long bones. **2. MRI Bones**: Show an MRI scan of the bones, highlighting the bone marrow, joints, and surrounding soft tissues. **3. Normal and Abnormal Findings:** Compare normal and abnormal findings, such as bone fractures, osteoporosis, or joint effusions.
NLHP 17.3	Hands on training of different types of Biopsy	The steps for training undergraduates in different types of biopsies: **Fine Needle Aspiration Biopsy (FNAB)** 1. Theoretical foundation: Understand the principles and indications of FNAB. 2. Simulation training: Practice FNAB on simulated models or phantoms.

		3. Observation: Observe experienced practitioners performing FNAB. 4. Assisted practice: Assist experienced practitioners during FNAB procedures. **Core Needle Biopsy (CNB)** 1. Theoretical foundation: Understand the principles and indications of CNB. 2. Simulation training: Practice CNB on simulated models or phantoms. 3. Observation: Observe experienced practitioners performing CNB. 4. Assisted practice: Assist experienced practitioners during CNB procedures. **Incisional Biopsy** 1. Theoretical foundation: Understand the principles and indications of incisional biopsy. 2. Simulation training: Practice incisional biopsy on simulated models or phantoms. 3. Observation: Observe experienced practitioners performing incisional biopsy. 4. Assisted practice: Assist experienced practitioners during incisional biopsy procedures. **Excisional Biopsy** 1. Theoretical foundation: Understand the principles and indications of excisional biopsy. 2. Simulation training: Practice excisional biopsy on simulated models or phantoms. 3. Observation: Observe experienced practitioners performing excisional biopsy. 4. Assisted practice: Assist experienced practitioners during excisional biopsy procedures. **Endoscopic Biopsy** 1. Theoretical foundation: Understand the principles and indications of endoscopic biopsy. 2. Simulation training: Practice endoscopic biopsy on simulated models or phantoms. 3. Observation: Observe experienced practitioners performing endoscopic biopsy. 4. Assisted practice: Assist experienced practitioners during endoscopic biopsy procedures.

Topic 18 Shat Kriyakala in surgical practice (LH :1 NLHT: 0 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO2, CO4,	Explain Shat Kriyakala in surgical practice.	CK	MK	KH	L_VC,L ,L&PPT	CL-PR,T-CS	F&S	II	-	LH

CO5										
CO1, CO4, CO7	Integrate the principles of Shatkriyakala to assess disease progression and implement appropriate surgical interventions for conditions like Arsha, Bhagandara, appendicitis, and cholecystitis.	CC	MK	K	L&PPT ,CBL,DIS	P-EXAM	F&S	II	V-KS	NLHP18.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 18.1	Surgical intervention according to Shatkriyakala - Special focus on Arsha, Bhagandara, and infective pathology ex.Appendicitis, Cholecystitis, etc.	**Steps** Shatkriyakala (Six Stages of Disease Progression and stages of treatment) Preparation: Review the patient's medical history and symptoms. Determine the stage of the disease based on Shatkriyakala principles. Plan the surgical intervention accordingly. **Surgical Intervention:** Stage 1 (Sanchaya): Early intervention to prevent disease progression. Stage 2 (prakopa): Addressing the initial symptoms and preventing complications. Stage 3 (prasara): Treating the disease before it becomes chronic. Stage 4 (sthanasamshraya): Managing the acute phase of the disease. Stage 5 (vyakta): Differentiating between similar diseases and targeting the specific one. Stage 6 (bedha): Treating the fully developed disease and preventing recurrence. Arshabhagandhara (Piles and Fistula-in-Ano) **Preparation:** Review the patient's symptoms and medical history. Perform diagnostic tests to confirm the condition. Plan the surgical procedure based on the severity of the condition .**Surgical Intervention:**

		Piles: Perform procedures like hemorrhoidectomy or stapled hemorrhoidopexy to remove or reduce hemorrhoids. Fistula-in-Ano: Perform fistulotomy or seton placement to treat the fistula. Infective Pathologies (Appendicitis and Cholecystitis) **Preparation**: Review the patient's symptoms, medical history, and diagnostic tests. Plan the surgical intervention based on the severity of the infection. Surgical Intervention: Appendicitis: Perform an appendectomy (laparoscopic or open) to remove the inflamed appendix. Cholecystitis: Perform a cholecystectomy (laparoscopic or open) to remove the inflamed gallbladder.

Topic 19 Samanya Vyadhi Parichaya (LH :6 NLHT: 3 NLHP: 6)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO2, CO4	Describe the importance of the body's response to injury or infectionIdentify the signs and symptoms along with different stages of Vranashotha	CK	MK	K	D,SIM, L&PPT ,D-M,PER	P-POS,PRN,P-MOD, P-EXAM,P-CASE	F&S	II	-	NLHT19.1
CO1, CO2, CO4	Explain Nidana, Samprapti, Prakara, Lakshana, Sadhya-asadhyata, Upadrava and Chikitsa of Vidhradi (Abscess) & Pidika (Boils)	CK	MK	K	L&PPT ,L_VC, L	Log book,CL-PR,M-MOD,COM, C-VC	F&S	II	-	LH
CO1, CO2, CO4	Describe Etiopathogenesis, Classifications, Complications & Management of DagdhaVrana (Burns and Scalds)	CK	MK	K	L_VC,L &PPT ,L,PER	M-CHT,M-MOD,M-POS,CL-PR,T-CS	F&S	II	-	LH
CO1,	Explain Marmaghata (shock) Definition, Classification,	CK	MK	K	L_VC,L	C-VC,CL-	F&S	II	-	LH

CO2, CO4, CO6	Etiopathogenesis, Clinical features, Diagnosis & management				&PPT ,PER,L	PR,PRN,T-CS				
CO1, CO2, CO4, CO6	Explain Etiopathogenesis Clinical features Diagnosis & management of Cardiogenic & Septic Shock & crush syndrome	CK	MK	K	L,L&PPT ,L_VC	T-CS,CL-PR,PRN	F&S	II	-	LH
CO1, CO2, CO5, CO6	Identify causes, risk factors, signs and symptoms and the importance of KothaUnderstand the role of bacterial infection in Kotha (Gangrene)	CK	MK	SH	PER,L,D,L_VC ,D-M	M-POS,DEB,PRN,M-CHT,CL-PR	F&S	II	-	NLHT19.2
CO1, CO2, CO4	Explain Nidana, types, Samprapti, Lakshana and Chikitsa of Granthi (Dermoid Cyst &Sabacious Cyst)	CK	MK	K	L_VC,L ,L&PPT	CL-PR,T-CS	F&S	II	-	LH
CO1, CO2, CO4	Explain the Nidana, types, Samprapti, Lakshana and Chikitsa of Arbuda	CK	MK	K	L,L&PPT ,L_VC	T-CS	F&S	II	-	LH
CO1, CO2, CO4	Illustrate the risk factors for tumor developmentDescribe tumor classification systemsExplain the importance of early detection and diagnosis	CAP	MK	K	L&PPT ,PER,DIS,TUT,D	PP-Practical,P-VIVA,PRN,VV-Viva,CL-PR	F&S	II	-	NLHT19.3
CO1, CO2, CO4	Define the characteristics of lumps or swellings along with a systematic examination to evaluate lumps or swellings.Differentiate between benign and malignant lumps.	CK	MK	K	RP,PER ,L_VC, TPW,D-BED	CHK,CL-PR,Mini-CEX,P-VIVA, VV-Viva	F&S	II	-	NLHP19.1
CO1, CO2,	Explain the pathophysiology of shock. Identify risk factors and causes of shock.	CK	MK	K	L&GD, PT,SIM,	SP,P-RP,P-VIVA	F&S	II	-	NLHP19.2

CO4, CO6	Describe the signs and symptoms of shock with its stages				PSM,RP					
CO1, CO3, CO6	Explain the principles of assessing and examining burn injuries with a systematic approach to evaluate burn cases.	CK	MK	K	L_VC,PER,D,PT,SIM	P-POS,PRN,P-MOD,P-VIVA,P-RP	F&S	II	-	NLHP19.3

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 19.1	Vranashotha-Nirukti, Nidana, Samprapti, Prakara, Lakshana, Sadhya-asadhyata, Upadrava and Chikitsa	Create a simulated patient scenario where students have to assess and manage inflammation. Quiz on Inflammation
NLHT 19.2	Explain etiopathogenesis, types, Clinical Features, Investigations, Differential Diagnosis, complications and management of Kotha (Gangrene)	Present real-life scenarios of patients with gangrene. Practice wound care and debridement techniques.
NLHT 19.3	Definition, Classification, Clinical features, Complications of Tumour	Lecture and Discussion Activities 1. Case studies: Present real-life scenarios of patients with tumors. 2. Debate: Assign students topics like "The Role of Genetics in Tumor Development" or "The Benefits and Risks of Tumor Surgery". 3. Tumor biology lecture: Provide an overview of tumor biology and pathogenesis. Interactive Activities 1. Tumor simulation: Create a simulated patient scenario where students have to diagnose and manage tumors. 2. "Tumor Jeopardy": Create a game show-style quiz. 3. Tumor puzzle: Create a puzzle where students match tumor types with corresponding symptoms. Group Activities 1. Create a poster or infographic: Assign groups a type of tumor to research and illustrate.

		2. Tumor role-play: Divide students into patient and healthcare provider roles. 3. "Tumor Challenge": Divide students into teams to solve tumor-related problems. Hands-on Activities Assessment Activities 1. Tumor quiz. 2. Case study analysis and presentation. 3. Reflective journaling: Ask students to reflect on their learning.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 19.1	Examination of Granthi (lump or Swelling)	**Steps** 1. Patient History: Ask about the duration and onset of the lump/swelling. Inquire about associated symptoms such as pain, fever, weight loss, or changes in size. Review any past medical history, including previous lumps or related conditions. Ask about family history of cancers or other relevant diseases. 2. Inspection: Position the patient comfortably and ensure good lighting. Observe the size, shape, and location of the lump. Note any changes in skin color or the presence of scars, ulcers, or visible pulsations. 3. Palpation: Wash your hands thoroughly before examination. Use the pads of your fingers to palpate the lump gently. Assess the following characteristics: Size: Measure the lump in two dimensions (length and width). Shape: Determine if it is round, oval, or irregular. Surface: Check if it is smooth, nodular, or irregular. Consistency: Identify if it is soft, firm, hard, or rubbery.

		Tenderness: Note any pain or discomfort on palpation. Mobility: Check if the lump is mobile or fixed to underlying structures. Temperature: Feel for any warmth over the lump, indicating inflammation. Fluctuation: Determine if the lump contains fluid by gently pressing on it. 4. Transillumination (if applicable): Darken the room and use a flashlight or penlight to shine through the lump. Fluid-filled lumps (e.g., cysts) may transilluminate, while solid masses will not. 5. Auscultation (if applicable): Use a stethoscope to listen for any bruits or abnormal sounds over the lump, especially if it is pulsatile. 6. Special Tests: Needle Aspiration or Biopsy: Perform if indicated to obtain a sample for cytological or histological examination. 7. Documentation: Record all findings meticulously, including the patient's history, examination findings, and any special tests performed. Note the characteristics of the lump and any associated symptoms.
NLHP 19.2	Emergency management in different types of shock	Steps Case Presentation/PBL/Role Play Hypovolemic Shock Case Presentation: Scenario: A patient presents with severe blood loss following a traumatic injury. They exhibit signs of tachycardia, hypotension, cold and clammy skin. Steps: Assessment: Evaluate the airway, breathing, and circulation (ABCs). Fluid Resuscitation: Administer crystalloids (normal saline or Ringer's lactate) rapidly. Stop the Bleeding: Apply pressure to external wounds, consider surgical intervention if necessary. Monitoring: Continuously monitor vital signs, urine output, and mental status. Cardiogenic Shock

Case Presentation:
Scenario: A patient with a history of myocardial infarction presents with chest pain, dyspnea, hypotension, and jugular venous distention.
Steps:
Assessment: Evaluate the ABCs, obtain a 12-lead ECG.
Oxygen Therapy: Administer high-flow oxygen.
Medications: Initiate inotropes (e.g., dobutamine) to improve cardiac output.
Revascularization: Prepare for possible percutaneous coronary intervention (PCI) or thrombolytic therapy.
Distributive Shock (Septic Shock)
Case Presentation:
Scenario: A patient with a severe infection presents with fever, hypotension, warm skin, and altered mental status.
Steps:
Assessment: Evaluate the ABCs, obtain blood cultures.
Antibiotics: Administer broad-spectrum antibiotics as soon as possible.
Fluid Resuscitation: Administer crystalloids to restore perfusion.
Vasopressors: Initiate vasopressors (e.g., norepinephrine) if hypotension persists despite fluid resuscitation.
Distributive Shock (Anaphylactic Shock)
Case Presentation:
Scenario: A patient presents with a sudden onset of hives, swelling, wheezing, and hypotension after exposure to an allergen.
Steps:
Assessment: Evaluate the ABCs.
Epinephrine: Administer intramuscular epinephrine immediately.
Oxygen Therapy: Provide supplemental oxygen.
Medications: Administer antihistamines (e.g., diphenhydramine) and corticosteroids (e.g., methylprednisolone).
Fluid Resuscitation: Administer crystalloids to maintain blood pressure.

		Obstructive Shock Case Presentation: Scenario: A patient with a history of deep vein thrombosis presents with sudden chest pain, dyspnea, and hypotension. Steps: Assessment: Evaluate the ABCs, obtain imaging (e.g., chest CT) to identify the obstruction. Oxygen Therapy: Administer high-flow oxygen. Relieve Obstruction: Consider thrombolytic therapy or surgical intervention to remove the obstruction. Monitoring: Continuously monitor vital signs and oxygen saturation.
NLHP 19.3	Assessment, examination, and documentation of Pramada Dagda (Burn) case	**Steps** **1. Initial Assessment:** Ensure Safety: Ensure the safety of both the patient and healthcare providers. Primary Survey: Airway: Check for airway patency, inhalation injury, or soot around the nose/mouth. Breathing: Assess respiratory rate and effort, listen for breath sounds, and check oxygen saturation. Circulation: Check heart rate, blood pressure, and signs of shock. Establish IV access. Disability: Evaluate neurological status using the AVPU scale (Alert, Verbal, Pain, Unresponsive). Exposure: Remove clothing and jewelry to assess the extent of burns. Maintain body temperature. **2. Secondary Assessment:** History Taking: Mechanism of Injury: Determine the cause (thermal, chemical, electrical, etc.). Time of Injury: Establish the time since the burn occurred. Past Medical History: Inquire about previous medical conditions, medications, and allergies. Tetanus Status: Check the patient's tetanus immunization history. Physical Examination: Extent of Burns: Use the Rule of Nines or Lund-Browder chart to estimate the total body surface area (TBSA) affected. Depth of Burns: Classify burns as superficial, partial-thickness, or full-thickness based on appearance

		and sensation. Associated Injuries: Assess for other injuries related to the burn incident (e.g., fractures, head injury). **3. Documentation:** Patient Information: Record the patient's demographics, medical history, and details of the burn incident. Burn Assessment: Location and Extent: Document the location, size, and percentage of TBSA affected. Depth: Note the depth and classification of burns. Symptoms: Record pain, blisters, edema, or any signs of infection. Interventions: Initial Treatment: Note any pre-hospital care provided. Medications: Record analgesics, antibiotics, and other medications administered. IV Fluids: Document the type and amount of fluids given. Follow-Up Plan: Outline the plan for ongoing care, dressing changes, and referral to a burn unit if necessary.

Topic 20 Vrana (LH :7 NLHT: 2 NLHP: 6)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO2, CO3, CO4, CO5	Explain the Nirukti ,Prakara,Nidana, Samprapti, , Prakara, Lakshana, Vrana Pariksha, Vrana Sadhya Asadhyatha of vrana and vrana vastu	CK	MK	K	L&PPT ,L,L_VC	CL-PR,T-CS	F&S	II	-	LH
CO1, CO2, CO4	Explain the Vrana Avastha of Dustavrana, Shuddha Vrana, Ruhyamana Vrana, Samyak Roodha Vrana and Vrana Upadrava	CK	MK	K	L,L_VC ,L&PPT	T-CS,CL-PR	F&S	II	-	LH
CO1, CO2,	Explain Vrana Chikitsa, Pathya-apathya and Shashti Upakrama – first 21 upakramas (poorva karma to vrana)	CK	MK	K	L_VC,L &PPT	PRN,CL-PR,T-CS	F&S	II	-	LH

CO4					,L					
CO1, CO2, CO4	Explain Shashti Upakrama –22- 40 upakramas	CK	MK	K	L&PPT ,L,L_V C	T-CS,CL-PR,PRN	F&S	II	-	LH
CO1, CO2, CO4	Explain Shashti Upakramas – 40 - 60 upakramas	CK	MK	K	L&PPT ,L,L_V C	CL-PR,PRN,T-CS	F&S	II	-	LH
CO1, CO2, CO4	Describe Ulcer – Definition, types, and wound healing stages and management	CK	MK	K	L&PPT ,L,L_V C	M-MOD,M-CHT,T-CS ,CL-PR,COM	F&S	II	-	LH
CO1, CO2, CO4	Explain Prameha pidaka - carbuncle and Diabetic wounds/ulcer	CK	MK	K	L&PPT ,L,L_V C	M-CHT,CL-PR,COM, T-CS,M-POS	F&S	II	-	LH
CO1, CO2, CO4	Identify wound healing phase & risk factors for wound complications (e.g., infection, dehiscence). Describe wound assessment techniques (e.g., visual inspection, measurement) & wound care principles	CK	MK	K	RP,PER ,D,SIM, D-M	PRN,DEB, CL-PR,INT	F&S	II	-	NLHT20.1
CO1, CO2, CO4	Identify the characteristics and causes of an ulcer and thorough examination to evaluate the ulcer.Differentiate between various types of ulcers.	CK	MK	K	CD,PT, RP,PER ,D-M	P-VIVA,P-EXAM,PRN,P-MOD,P-PS	F&S	II	-	NLHP20.1
CO1, CO2, CO4, CO5	Explain the function of the peripheral nervous system, Identify any abnormalities, and localize potential lesions accordingly.	CC	MK	K	PT,PER	PRN,P-EXAM,P-VIVA	F&S	II	-	NLHP20.2

CO1, CO2, CO4	Analyze the pathogenesis, risk factors, microbial causes, prevention strategies, and clinical presentation of Surgical Site Infections (SSIs) to enhance early diagnosis and effective management.	CC	MK	K	SIM,PER,RP	P-VIVA,PUZ,QZ ,VV-Viva,P-EXAM	F&S	II	-	NLHT20.2
CO1, CO2, CO4	Demonstrate the students on the correct procedure for wound dressing, ensuring optimal healing and preventing infection for training purpose	PSY-GUD	MK	KH	D-BED,TUT,PT,DIS,D	C-VC,OSPE,P-VIVA,CHK,INT	F&S	II	-	NLHP20.3

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 20.1	Sadhyovrana -(Traumatic wounds) – Nidana, Prakara, Lakshana, Upadrava and Chikitsa.	Present real-life traumatic wound cases. Analyze wound management decisions Develop treatment plans. Develop a wound management checklist. Role-play traumatic wound scenarios.
NLHT 20.2	Surgical site infection.	Present real-life SSI cases for group discussion. Analyze SSI prevention measures and outcomes. Develop SSI prevention plans.

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 20.1	Examination of an Ulcer	**Steps** 1. Patient History: Onset and Duration: Ask when the ulcer first appeared and how long it has been present.

		Symptoms: Inquire about pain, discharge, bleeding, itching, and any other associated symptoms. Medical History: Review any underlying medical conditions such as diabetes, vascular diseases, or previous ulcers. Lifestyle Factors: Discuss smoking, alcohol use, diet, and any recent trauma or injury. 2. Inspection: Location and Size: Measure the ulcer and note its exact location on the body. Shape and Edges: Describe the shape (round, oval, irregular) and the edges (punched-out, undermined, rolled, or sloping). Base: Look at the base of the ulcer to see if it is clean, granulating, sloughy, or necrotic. Surrounding Skin: Examine the skin around the ulcer for redness, swelling, warmth, and any signs of infection or dermatitis. Discharge: Note the type (serous, purulent, bloody) and amount of any discharge. 3. Palpation: Tenderness: Check for tenderness around and on the ulcer. Induration: Assess for induration (hardness) around the ulcer, which can indicate chronic inflammation or malignancy. Temperature: Feel the temperature of the surrounding skin to detect any increased warmth. 4. Special Tests: Swab for Culture: If there is discharge, take a swab for microbiological examination to identify infection. Biopsy: If the ulcer appears suspicious or fails to heal, perform a biopsy to rule out malignancy. Doppler Ultrasound: Assess blood flow if a vascular cause is suspected.
NLHP 20.2	Examination of the peripheral nerve lesions	**Preparation steps:** 1. Gather Equipment: Reflex hammer, tuning fork (128 Hz), cotton wool, safety pin, and a neurotip. 2. Patient Preparation: Ensure the patient is comfortable and explain the procedure to gain consent.

		3. Environment: A quiet room with good lighting and privacy. **Steps for Examination** 1. Inspection: ◦ Observe for muscle wasting, fasciculations, and abnormal movements of both side. ◦ Look for any scars or deformities. 2. Tone: ◦ Assess muscle tone by passively moving the patient's limbs. ◦ Check for hypertonia or hypotonia. 3. Power: ◦ Test muscle strength in various muscle groups. ◦ Use the Medical Research Council (MRC) scale (0-5) to grade power. 4. Reflexes: ◦ Test deep tendon reflexes (e.g., biceps, triceps, knee jerk). ◦ Note any hyperreflexia or hyporeflexia. 5. Sensation: ◦ Test light touch, pain, and temperature sensation using cotton wool and a neurotic. ◦ Assess vibration sense with a tuning fork, starting distally and moving proximally if needed. 6. Coordination: ◦ Perform tests like finger-to-nose and heel-to-shin to assess coordination. ◦ Check for dysdiadochokinesis (inability to perform rapid alternating movements
NLHP 20.3	Demonstration of wound dressings	**Steps:** 1. Preparation: • Gather essential materials: Sterile gloves, Vrana Shodhana/ Ropan medicines, instruments, saline solution, gauze, adhesive tape, antibiotic ointment, and non-stick dressing.

		• Wash hands thoroughly. 2. Initial Inspection: • Assess the wound for size, shape, discharge, site, depth, and signs of infection. 3. Cleaning/debridement/: • Rinse the wound with saline solution/ kwatha. • Pat dry with sterile gauze. 4. Application of Ointment/oil/ lepa: • Apply a thin layer of antibiotic / Ointment/oil / lepa on the wound. 5. Dressing the Wound: • Place a non-stick dressing over the wound. • Secure it with gauze and adhesive tape. 6. Final Inspection: • Ensure the dressing is secure but not too tight/loose. • Check for any immediate allergic reactions or discomfort.

Topic 21 Kshudra Roga (LH :2 NLHT: 0 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO4, CO5	Define Kshudrarogas:Clinical features and management of first 20 disorders i.e Ajagalika to Sharkararbhuda	CK	MK	K	L,L&GD,D,L&PPT ,PT	P-VIVA,PP-Practical,PRN,VV-Viva,P-EXAM	F&S	II	-	LH
CO1, CO4, CO5	Define Kshudrarogas: Clinical features and management of last 23 disorders i.e Pama to Gudhabramsha	CK	MK	K	L,PL,L&GD,PER,L&PPT	T-OBT,VV-Viva,SA,T-CS,P-REC	F&S	II	-	LH
CO1, CO2, CO4	Demonstrate the proper techniques for a comprehensive hand examination, evaluating structure and function, and identifying any abnormalities.	PSY-GUD	MK	KH	SDL,D-BED,DIS,TUT, CBL	PA,P-VIVA,VV-Viva ,INT,PP-Practical	F&S	II	-	NLHP21.1

Non Lecture Hour Theory		
S.No	**Name of Activity**	**Description of Theory Activity**
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 21.1	Examination of the Hand	**Steps:** **Preparation:** Gather materials: Examination gloves, a penlight, measuring tape, and a reflex hammer. Ensure the patient's hand is clean and free from any hindrances. **Initial Observation:** Inspect the hand for swelling, redness, deformities, or any skin abnormalities. Note the condition of the nails and the presence of any scars or atrophy. **Palpation:** Gently palpate the bones, joints, and soft tissues. Check for tenderness, swelling, and temperature differences. **Range of Motion:** Ask the patient to perform active movements such as flexion, extension, abduction, adduction, and opposition. Assess the range and note any pain or limitation. **Strength Testing:** Evaluate the muscle strength by asking the patient to perform specific hand grips and movements against resistance. Compare strength in both hands. **Special Tests:** Perform tests like Tinel's sign, Phalen's test, and Finkelstein’s test to check for carpal tunnel syndrome, De Quervain's tenosynovitis, etc. Note any positive signs and their implications. **Neurological Examination:** Check sensation across the dermatomes of the hand.

		Evaluate reflexes using the reflex hammer. **Final Assessment:** Summarize findings and document any abnormalities or concerns. Discuss further steps or refer to a specialist if necessary.

Topic 22 Manya Vikara (LH :3 NLHT: 3 NLHP: 6)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO2, CO4	Define Nidana, Samprapti, Lakshana and Chikitsa of Gandamala and Apachi -Lymphadenitis.	CK	DK	K	L&PPT ,L	P-VIVA,P-REC,T-CS, PRN,CL-PR	F&S	II	-	LH
CO1, CO2, CO4	Define Pashanagardhabha – Etiopathogenesis, Clinical Features, Investigations, Differential Diagnosis, Complications, and Management of Parotitis.	CK	MK	KH	L,L_VC ,L&PPT	CL-PR,P-VIVA,PRN, VV-Viva,T-CS	F&S	II	-	LH
CO1, CO2, CO4	Examine the anatomical structure, vascular and neural connections, physiological functions, and pathological conditions of the thyroid gland to understand its role in metabolism, growth, and endocrine regulation.	CAP	MK	K	L&PPT ,L,DIS, PL	P-VIVA,T-CS,P-EXAM,VV-Viva	F&S	II	V-RS,V-KS,V-RS	NLHT22.1
CO1, CO2, CO4	Define Etiopathogenesis, Clinical feature , Investigations, Diffrential Diagnosis , complications, and management of Galaganda (Goitre)	CC	MK	K	L&PPT ,L_VC, L&GD, L	T-CS,CL-PR,PRN, C-VC	F&S	II	-	LH
CO1, CO2, CO4	Analyze the pathophysiology, clinical presentation, complications, and management of toxic goiter and thyroiditis, integrating diagnostic approaches and treatment modalities for effective clinical decision-making.	CAP	MK	K	SIM,DIS,CBL, L_VC,SDL	P-VIVA,CL-PR,PRN, VV-Viva,P-CASE	F&S	II	-	NLHT22.2

CO1, CO2, CO4	Evaluate the etiology, risk factors, and pathophysiology of thyroid neoplasms, distinguishing between benign and malignant types, while integrating the Ayurvedic perspective on the pathogenesis of Galaganda.	CAN	MK	K	DIS,RP, L_VC,L RI,PER	C-VC,P-VI VA,CL-PR,PRN	F&S	II	-	NLHT22.3
CO1, CO2, CO4	Demonstrate accurately the thyroid gland for any abnormalities, i ncluding enlargement, nodules, or signs of thyroid dysfunction	CAP	MK	K	L&GD, D-M,D, PL,L_V C	Mini-CEX, P-EXAM,P -VIVA,P-CASE,PRN	F&S	II	-	NLHP22.1
CO1, CO2, CO4	Demonstrate accurately the neck for structural abnormalities, lymph node enlargement, thyroid or vascular anomalies, etc.	CAP	MK	K	L_VC,C BL,DIS, CD,PER	CHK,VV-V iva,P-EXA M,INT,P-VIVA	F&S	II	-	NLHP22.2
CO1, CO2, CO4	Demonstrate and learn to assess the lymphatic system for signs of lymphadenopathy or other associate pathological conditions	CAP	MK	K	PT,D,DI S,TUT, L&GD	P-VIVA,O SCE, C-VC ,Mini-CEX, P-EXAM	F&S	II	-	NLHP22.3

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 22.1	Thyroid gland - anatomy & physiology	**Anatomy Dissection**: Use a virtual dissection tool or models to explore the thyroid gland's anatomy. Have students label the anatomical parts and discuss the blood supply and innervation. **Clinical Case Studies**: Present case studies of patients with thyroid disorders. Students diagnose the condition, describe the physiological basis of the symptoms, and suggest treatments. **Interactive Quizzes and Flashcards**: Develop quizzes and flashcards for key terms and concepts related to thyroid anatomy and physiology.

		Use apps or platforms that allow students to test their knowledge in a fun and engaging way. **Group Discussions and Presentations**: Assign topics related to thyroid gland physiology (e.g., the impact of iodine deficiency on thyroid function) for group research and presentations. Encourage students to ask questions and debate different perspectives.
NLHT 22.2	Toxic goiter, Thyroiditis	**Pathophysiology Diagrams**: Students create detailed diagrams showing the development and pathophysiological mechanisms of toxic goiter and thyroiditis. Use these diagrams to present to the class and explain the processes involved. **Clinical Case Discussions**: Provide case studies of patients with toxic goiter and different types of thyroiditis. Students diagnose, explain the clinical symptoms, suggest diagnostic tests, and propose treatment plans. **Laboratory Tests Analysis**: Analyze lab results for thyroid function tests (e.g., TSH, T3, T4 levels) in patients with toxic goiter and thyroiditis. Interpret the results and discuss their implications. **Group Presentations**: Assign groups to research and present on specific types of thyroiditis, detailing their etiology, clinical features, and treatment. Encourage discussions and Q&A sessions to foster deeper understanding. **Patient Education Role-play**: Students role-play as healthcare providers explaining the condition, treatment options, and lifestyle modifications to a patient with toxic goiter or thyroiditis. Focus on effective communication skills and patient-centric care.
NLHT 22.3	Neoplasm of Galaganda (thyroid) -Nidana, Samprapti, Lakshana and Chikitsa	**Etiology Analysis**: Students create a chart or mind map outlining the different causes and risk factors for thyroid

		neoplasms. Group discussion on how these factors are viewed in both modern medicine and Ayurveda. **Clinical Case Presentations**: Provide case studies of patients with thyroid neoplasms. Students diagnose the condition, describe the clinical features, and suggest both modern and Ayurvedic treatment plans. **Treatment Debate**: Organize a debate on the pros and cons of conventional versus Ayurvedic treatment modalities for thyroid neoplasms. Encourage students to research and present evidence-based arguments.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 22.1	Examination of Galaganda (thyroid gland)	**Steps:** **Preparation:** Gather materials: Stethoscope, a glass of water, and gloves. Ensure the patient is comfortably seated with the neck exposed. **Inspection:** Observe the neck for any visible swelling, asymmetry, or scars. Ask the patient to swallow a sip of water while you watch for upward movement of the thyroid gland. **Palpation:** Stand behind the patient and place your fingers on either side of the trachea. Ask the patient to swallow again and feel for the thyroid gland's consistency and movement. Gently palpate for any nodules or tenderness. Assess each lobe individually and the isthmus for size and texture. **Auscultation:** Using the stethoscope, listen over the thyroid gland for any bruits, which could indicate increased vascularity.

		Special Tests: Perform Pemberton's sign by asking the patient to raise their arms above their head for a few minutes. Observe for facial congestion or cyanosis, indicating thoracic inlet obstruction. **Evaluation:** Note any findings such as goiter, nodules, or irregularities and any systemic findings. Document the size, texture, and presence of any abnormalities. **Discussion:** Explain the findings to the patient and discuss any necessary further tests or referrals.
NLHP 22.2	Examination of the Gala (Neck)	**Steps:** **Preparation:** Gather materials: Stethoscope, gloves, and a flashlight. Ensure the patient is comfortably seated with neck exposed. **Inspection:** Observe the neck for symmetry, swelling, scars, or visible pulsations. Note any abnormalities such as masses or skin changes. **Palpation:** Palpate the lymph nodes: Start with preauricular, posterior auricular, occipital, submental, submandibular, cervical, and supraclavicular nodes. Check for tenderness, size, consistency, and mobility. Palpate the thyroid gland by placing your fingers on either side of the trachea and asking the patient to swallow. Assess the carotid arteries for pulse and any abnormal thrills. **Auscultation:** Use a stethoscope to listen over the carotid arteries for bruits, indicating turbulent blood flow. Listen over the thyroid gland for any vascular sounds. **Range of Motion:** Ask the patient to perform neck movements: flexion, extension, lateral bending, and rotation. Note any pain, limitation, or discomfort.

		Neurological Examination: Check for muscle strength and tone in the neck muscles. Assess the cranial nerves by testing functions such as shrugging shoulders (CN XI - Accessory nerve). **Documentation:** Record all findings, noting any abnormalities or asymmetries. Discuss potential next steps or referrals if needed.
NLHP 22.3	Examination of a Lymphatic system	**Steps:** **Preparation:** Gather materials: Gloves, a stethoscope, and a measuring tape. Ensure the patient is comfortably seated or lying down. **Inspection:** Observe the skin for any swelling, redness, or visible lymph nodes. Note any asymmetry or obvious abnormalities. **Palpation:** Systematically palpate the lymph nodes: cervical, axillary, inguinal, supraclavicular, mammary, and popliteal. Check for size, shape, size, consistency, mobility, tenderness, and warmth. Document any enlarged lymph nodes. **Special Techniques:** For deep lymph nodes, such as the retroperitoneal, consider imaging studies like ultrasound or CT scan. Assess the spleen as it is part of the lymphatic system by palpating the left upper quadrant of the abdomen. **Auscultation:** Use a stethoscope to listen over the lymph nodes for any abnormal bruits, which could indicate vascular anomalies. **Assessment of Associated Structures:** Evaluate the tonsils, spleen, and thymus if accessible. Check for signs of systemic infection or lymphatic diseases.

		Documentation: Record all findings, including any abnormalities in size, shape, or tenderness of the lymph nodes. Plan further investigations if any pathological findings are noted.

Topic 23 Sira Vikara (Venous Disorders) (LH :3 NLHT: 1 NLHP: 4)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO2, CO4	Define Surgical anatomy and pathology of key surgical regions (e.g., abdomen, thorax, pelvis, limbs) and their role in the diagnosis and management of Venous diseases. Discuss the principles of biopsy, excision, and histopathological e valuation.	CK	MK	K	PL,L&GD,PER,L_VC	PA, C-VC, T-CS,SA,VV-Viva	F&S	II	V-RS,V-KS,V-RS	NLHT23.1
CO1, CO2, CO4	Define Etiopathogenesis, Clinical feature, Investigations, Differential Diagnosis, complications and management of Superficial and Deep venous Thrombosis	CK	MK	K	L&PPT,L	PA,P-VIVA,VV-Viva,PRN	F&S	II	-	LH
CO1, CO2, CO4	Define Etiopathogenesis, Clinical Features, Investigations, Differential Diagnosis, complications, and management of Varicose veins	CK	MK	K	PL,SDL,LRI,FC,L_VC	CL-PR,M-CHT,VV-Viva,P-VIVA,PRN	F&S	II	-	LH
CO1, CO2, CO4	Demonstrate varicose veins, evaluate their severity, and their implications for treatment and patient care.	PSY-GUD	MK	K	PL,TUT,DIS,PT,CD	Mini-CEX, CHK,P-MOD,P-VIVA, CL-PR	F&S	II	-	NLHP23.1
CO1, CO2, CO4	Describe Etiopathogenesis, Clinical features, Investigations, Differential Diagnosis, Complications (Varicose eczema, Lipodermosclerosis), and Management of Siraja Vrana (Venous Ulcers).	CK	MK	K	L_VC,L,L&PPT,PER	INT,T-CS, C-VC,C-INT,P-VIVA	F&S	II	-	LH

CO1, CO2, CO4	Differentiate between unilateral and bilateral lower limb edema, identifying underlying causes and appropriate management strategies.	CAN	MK	KH	PT,SDL,CD,CBL,L_VC	PRN, C-VC,CL-PR,P-VIVA,P-EXAM	F&S	II	-	NLHP23.2

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 23.1	Surgical Anatomy & Surgical Pathology	**Cadaveric Dissection**: Engage students in hands-on dissection to explore surgical anatomy. Highlight critical anatomical landmarks and discuss their relevance in surgical procedures. **Surgical Case Studies**: Present real-life surgical cases. Have students diagnose conditions based on anatomical and pathological findings and suggest surgical interventions. **Pathology Reports Analysis**: Review and analyze pathology reports from biopsy and surgical specimens. Discuss the implications of the findings and their impact on patient management. **Anatomy and Pathology Correlation**: Create charts or models showing the correlation between anatomical structures and pathological processes. Discuss how anatomical variations can influence disease presentation and surgical outcomes.

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 23.1	Examination of Varicose Vein	**Steps:** Preparation: Gather materials: Tape measure, stethoscope, gloves, and a Doppler ultrasound (if available). Ensure the patient is standing up during the inspection and palpation for a more accurate assessment.

		Inspection: Observe the legs for visible signs of varicose veins, noting the location, size, and pattern. Look for skin changes such as discoloration, ulcers, or dermatitis. Palpation: Gently palpate the varicose veins to assess for tenderness, temperature, and firmness. Check for any signs of thrombosis or skin changes around the veins. Special Tests: Trendelenburg Test: Elevate the patient's leg, apply a tourniquet to the thigh, and have the patient stand up. Observe for rapid filling of veins which indicates valvular incompetence. Doppler Ultrasound: If available, use to evaluate venous flow and valve function. Measure and Document: Measure the circumference of the affected areas at different levels of the leg to track swelling and varicosity changes. Document findings including the severity, pattern, and any associated symptoms. Patient Discussion: Explain the findings to the patient. Discuss lifestyle changes, compression stockings, and potential medical or surgical treatments if necessary.
NLHP 23.2	Examination and differential diagnosis of unilateral and bilateral lower limb edema	**Steps:** **Preparation:** Gather materials: Measuring tape, stethoscope, and gloves. Ensure the patient is comfortably seated or lying down with legs exposed. **Initial History:** Take a thorough history including onset, duration, and associated symptoms (pain, redness, warmth, shortness of breath). Ask about medical history (heart failure, liver disease, kidney disease, venous insufficiency, or recent trauma). **Inspection:** Observe both lower limbs for swelling, asymmetry, discoloration, skin changes (ulceration, redness,

cyanosis).
Note any visible varicose veins, surgical scars, or signs of infection.
Palpation:
Gently palpate the swollen area to assess pitting (press the skin for a few seconds and observe the indentation).
Compare temperature between limbs to identify increased warmth (suggesting infection or inflammation).
Assess for tenderness, firmness, and extent of edema.
Measurement:
Measure the circumference of both lower limbs at fixed points (ankles, calves, and thighs).
Compare measurements to identify asymmetry and severity of swelling.
Auscultation:
Listen over the femoral and popliteal arteries for bruits, indicating vascular abnormalities.
Special Tests:
Homan's Sign: Dorsiflex the foot to check for calf pain (suggesting deep vein thrombosis).
Venous Doppler Ultrasound: If available, use to assess venous flow and identify obstruction or reflux.
Differential Diagnosis:
Unilateral Edema:
Deep vein thrombosis
Cellulitis or infection
Trauma or injury
Venous insufficiency
Tumor or obstruction
Bilateral Edema:
Heart failure
Chronic kidney disease
Liver cirrhosis
Chronic venous insufficiency
Hypoalbuminemia

Topic 24 Dhamani Vikara (Arterial disorders) (LH :3 NLHT: 0 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO2, CO4	Define Etiopathogenesis, Clinical Features, Investigations, Differential diagnosis, complications, and management of Aneurysm.	CK	MK	K	L_VC,L&GD,L&PPT,L	CL-PR,P-VIVA,PRN,T-CS,VV-Viva	F&S	II	-	LH
CO1, CO2, CO4	Define Etiopathogenesis, CF, Investigations, DD, Complications and management of Burger's disease	CK	MK	K	L&GD, L,L&PPT,DIS,CD	P-VIVA,CL-PR,PA,M-POS,VV-Viva	F&S	II	-	LH
CO1, CO2, CO4	Define Etiopathogenesis, CF, Investigations, DD, Complications and management of Raynaud's disease	CK	MK	K	L,L_VC,L&PPT,L&GD	VV-Viva,CL-PR,P-VIVA,T-CS,COM	F&S	II	-	LH
CO1, CO2, CO4	Demonstrate accurate assessment for peripheral vascular diseases, including arterial and venous disorders, and differentiate between them for appropriate diagnosis and management.	PSY-GUD	MK	K	SIM,D-M,D,CD,DIS	P-VIVA,INT,P-EXAM, C-VC,C-INT	F&S	II	-	NLHP24.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity

NLHP 24.1	Examination of the Dhamani Vikara (peripheral vascular diseases)	**Steps:** **Preparation:** Gather materials: Stethoscope, Doppler ultrasound (if available), measuring tape, and gloves. Ensure the patient is comfortably seated or lying down with the legs exposed. **Initial History:** Take a thorough history including symptoms (pain, cramping, discoloration), duration, and any aggravating or relieving factors. Ask about medical history (diabetes, hypertension, smoking, hyperlipidemia). **Inspection:** Observe the skin for color changes, ulcers, hair loss, and atrophy. Note any visible varicose veins, edema, or signs of infection. **Palpation:** Palpate pulses (radial, femoral, popliteal, posterior tibial, and dorsalis pedis) and compare bilaterally. Assess the temperature of the skin, checking for cold extremities which may indicate arterial insufficiency. Palpate for tenderness, particularly in the calf muscles. **Measurement:** Measure limb circumference at fixed points (ankles, calves, and thighs) to assess for swelling or asymmetry. **Special Tests:** **Ankle-Brachial Index (ABI):** Compare blood pressure in the ankle with the arm using a Doppler to detect peripheral artery disease. **Buerger's Test:** Elevate the legs and observe for pallor. Lower the legs and check for reactive hyperemia. **Venous Doppler Ultrasound:** If available, use to assess for venous reflux or deep vein thrombosis. **Capillary Refill Time:** Press on the nail bed and observe the time taken for color to return; prolonged refill time may indicate poor perfusion. **Auscultation:** Listen for bruits over major arteries which may indicate stenosis. **Documentation and Differential Diagnosis:**

		Record all findings, noting any abnormalities in pulses, color, temperature, or swelling. Consider differential diagnoses such as peripheral artery disease, chronic venous insufficiency, lymphedema, or deep vein thrombosis.

Topic 25 Snayu Vikara (Diseases of tendons and ligaments) (LH :2 NLHT: 0 NLHP: 4)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO2, CO4	Define Diseases of tendons and ligaments – Tendonitis, tenosynovitis, ganglion and their management Dupuytren's contracture	CK	MK	K	L&PPT ,L&GD, PL,L,B L	PP-Practica l,P-EXAM, T-CS,PRN, CL-PR	F&S	II	-	LH
CO1, CO2, CO4	Define Amputation, Classifications, Indication & Contraindications	CK	MK	K	L&GD, L_VC,L &PPT ,L	T-CS,PA,P RN,SA,VV-Viva	F&S	II	-	LH
CO1, CO2, CO3, CO4, CO5	Demonstration of peripheral vascular diseases, perform amputatio ns when necessary, and manage potential complications.	PSY-MEC	MK	K	CBL,T UT,DIS, RLE,PS M	SBA,VV-V iva,DEB,P RN,P-EXAM	F&S	II	-	NLHP25.1
CO1, CO2, CO4	Demonstrate the diagnosis of diseases affecting the muscles, liga ments, tendons, and fascia, understanding their function, and identifying any pathological conditions.	PSY-MEC	DK	K	PER,DI S,D,CD, D-BED	VV-Viva,M -MOD,CL-PR,Log book,OSCE	F&S	II	-	NLHP25.2

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 25.1	Techniques of Amputation & Complications with examples of individual amputation	**Steps:** Preparation: Gather materials: Stethoscope, Doppler ultrasound, measuring tape, gloves, and surgical instruments. Ensure the patient is comfortably positioned with the affected limb exposed. Initial History: Take a thorough history including symptoms (pain, cramping, discoloration), duration, and any aggravating or relieving factors. Ask about medical history (diabetes, hypertension, smoking, hyperlipidemia). Inspection: Observe the skin for color changes, ulcers, hair loss, and atrophy. Note any visible varicose veins, edema, or signs of infection. Palpation: Palpate pulses (radial, femoral, popliteal, posterior tibial, and dorsalis pedis) and compare bilaterally. Assess the temperature of the skin, checking for cold extremities which may indicate arterial insufficiency. Palpate for tenderness, particularly in the calf muscles. Measurement: Measure limb circumference at fixed points (ankles, calves, and thighs) to assess for swelling or asymmetry. Special Tests: Ankle-Brachial Index (ABI): Compare blood pressure in the ankle with the arm using a Doppler to detect peripheral artery disease. Buerger’s Test: Elevate the legs and observe for pallor. Lower the legs and check for reactive hyperemia. Venous Doppler Ultrasound: If available, use it to assess for venous reflux or deep vein thrombosis. Capillary Refill Time: Press on the nail bed and observe the time taken for color to return; prolonged refill time may indicate poor perfusion. Auscultation:

		Listen for bruits over major arteries which may indicate stenosis. Amputation Techniques: Preoperative Planning: Assess the viability of the limb, plan the level of amputation, and prepare the patient. Surgical Procedure: Perform the amputation with an aseptic technique, ensuring proper hemostasis and shaping the stump for prosthetic fitting. Postoperative Care: Monitor for complications, manage pain, and initiate rehabilitation. Complications: Infection: Monitor for signs of infection and treat promptly with antibiotics. Phantom Limb Sensation: Educate the patient about phantom limb sensations and provide appropriate interventions. Residual Limb Pain: Manage pain with medications and physical therapy. Joint Contractures: Prevent contractures with proper positioning and physical therapy. Deep Vein Thrombosis (DVT): Use anticoagulants and compression therapy to prevent DVT.
NLHP 25.2	Examinations of Diseases of Snayu Vikara (Muscle, Ligaments, Tendon and Fascia)	**Steps:** Preparation: Gather materials: Stethoscope, measuring tape, goniometer, gloves, and reflex hammer. Ensure the patient is comfortably seated or lying down, with the affected area exposed. Initial History: Take a thorough history, including symptoms (pain, stiffness, weakness, swelling), onset, and any aggravating or relieving factors. Ask about medical history (trauma, overuse injuries, occupational stress, systemic diseases like rheumatoid arthritis or lupus). Inspection: Observe the affected area for swelling, redness, bruising, atrophy, or deformity. Note any changes in posture or gait. Palpation: Gently palpate the muscles, ligaments, tendons, and fascia for tenderness, swelling, warmth, and abnormalities.

		Assess muscle tone, bulk, and tenderness. Check for crepitus (a crackling sound) in the tendons during movement. Range of Motion: Ask the patient to perform active and passive movements to assess the range of motion. Use a goniometer to measure joint angles accurately. Note any limitations, pain, or discomfort during movement. Strength Testing: Evaluate muscle strength using a grading system (0-5) by asking the patient to resist your movements. Compare strength in both limbs to identify asymmetry. Special Tests: Muscle: Perform tests like manual muscle testing (MMT) and electromyography (EMG) if available. Ligament: Conduct stress tests (e.g., Lachman test for ACL integrity) to assess ligament stability. Tendon: Use the Thompson test for Achilles tendon rupture and other specific tests for different tendons. Fascia: Check for signs of plantar fasciitis by palpating the sole and assessing for pain. Neurological Examination: Assess reflexes using a reflex hammer. Check for sensation and motor function in the affected area. Imaging and Further Tests: Recommend imaging studies like X-rays, MRI, or ultrasound to confirm the diagnosis and assess the extent of injury. Documentation: Record all findings, noting any abnormalities in muscle strength, degree of motion, and special tests. Discuss potential diagnoses and further investigations if needed.

Topic 26 AIDS - HIV and Hepatitis (B and C) (LH :1 NLHT: 0 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1,	Describe Care of AIDS - HIV and hepatitis infected (Hepatitis B	CC	MK	K	CD,L_V	C-VC,T-C	F&S	II	V-RN	LH

CO2, CO3, CO4	and C) patients.				C,SDL, L&PPT ,L	S,PA,VV-Viva,SA				
CO1, CO3, CO4	Demonstrate to ensure the safety of healthcare workers and patients by implementing appropriate infection control measures when dealing with HIV and Hepatitis B and C infected patients.	PSY-GUD	MK	KH	L_VC,DIS,SDL, PER,PT	PRN,SA,PA,P-VIVA, VV-Viva	F&S	II	-	NLHP26.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 26.1	Safety Precautions in the patient of HIV and hepatitis infected Hepatitis B and C Patients	**Steps:** Preparation: Gather materials: Personal protective equipment (PPE) including gloves, masks, gowns, and eye protection. Ensure availability of hand hygiene supplies (hand sanitizer, soap, and water). Hand Hygiene: Perform hand hygiene before and after patient contact. Use alcohol-based hand rub or wash hands with soap and water for at least 20 seconds. Use of Personal Protective Equipment (PPE): Wear gloves when coming into contact with blood, body fluids, secretions, or contaminated items. Use masks, gowns, and eye protection if there is a risk of splashes or sprays of blood or body fluids. Safe Injection Practices: Use sterile, single-use needles and syringes for injections. Dispose of needles and syringes in puncture-resistant sharps containers immediately after use. Environmental Cleaning: Clean and disinfect surfaces and equipment that may have come into contact with blood or body fluids. Use appropriate disinfectants and follow the manufacturer's instructions for use.

		Patient Placement: Place patients with known or suspected infectious diseases in private rooms or cohorts with patients with the same infection. Limit patient movement within the facility to reduce the risk of transmission. Respiratory Hygiene and Cough Etiquette: Encourage patients to cover their mouth and nose with a tissue when coughing or sneezing. Provide tissues and no-touch receptacles for disposal. Safe Handling of Linen and Waste: Handle soiled linen with minimal agitation to avoid contamination of air, surfaces, and persons. Dispose of medical waste, including contaminated linen, in designated containers. Education and Training: Educate healthcare workers on infection control practices and the importance of adhering to safety precautions. Provide training on the proper use of PPE and safe handling of potentially infectious materials. Reporting and Follow-Up: Report any exposure incidents (needlestick injuries, splashes) immediately to the designated person or health care professional. Follow up with appropriate post-exposure prophylaxis and medical evaluation.

Paper 2 (Shalya Tantra Chikitsa Siddhanta)										
A3 Course out come	**B3 Learning Objective (At the end of the session, the students should be able to)**	**C3 Domain/sub**	**D3 MK / DK / NK**	**E3 Level**	**F3 T-L method**	**G3 Assessment**	**H3 Assessment Type**	**I3 Term**	**K3 Integration**	**L3 Type**
Topic 27 Bhagna (Skeletal Injuries) (LH :3 NLHT: 5 NLHP: 8)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**

CO1, CO2, CO4	Describe Prakara of Bhagna including pathological fracture, Samanya Lakshana, Upadrava, and Chikitsa of Bhagna	CC	MK	K	X-Ray, L&GD, L&PPT ,L,CD	VV-Viva,CL-PR,PP-Practical,COM,PRN	F&S	II	-	LH
CO1, CO2, CO4	Analyze the anatomical structure, biomechanical mechanisms, clinical presentation, diagnosis, and management of scapular and clavicular fractures.	CC	MK	K	X-Ray,SDL,DIS, D-M,L_VC	VV-Viva,SA,P-CASE,Logbook,PP-Practical	F&S	II	-	NLHT27.1
CO1, CO2, CO4	Define Clinical features, Diagnosis, Complications, and Management - humerus, radius, ulna,	CK	MK	K	L,L_VC ,D,TUT, X-Ray	VV-Viva,PRN,P-EXAM,PP-Practical,P-VIVA	F&S	II	-	LH
CO1, CO2, CO4	Analyze the anatomical structure, fracture mechanisms, clinical presentation, diagnosis, management, and rehabilitation strategies for femur and patella fractures.	CC	MK	K	L&GD, PBL,SIM,PER, PL	P-VIVA,Logbook,SA,PRN,PA	F&S	II	-	NLHT27.2
CO1, CO2, CO4	Examine the anatomical features, assess fracture mechanisms, interpret clinical presentations, formulate diagnostic approaches, implement management strategies, and integrate rehabilitation and physiotherapy principles for tibia and pelvis fractures.	CK	MK	K	X-Ray, CBL,DIS,RP,PER	P-VIVA,COM,P-EXAM,SA,PRN	F&S	II	-	NLHT27.3
CO1, CO2, CO4	Describe the signs and symptoms of joint dislocations. Identify common joints prone to dislocation (e.g., shoulder, knee, hip) and discuss their signs and symptoms, types, diagnostic techniques, management, and complications.	CC	MK	K	X-Ray, D,SY,PER,L_VC	VV-Viva,PA,DEB,PP-Practical, C-VC	F&S	II	-	NLHT27.4
CO1,	Analyze the anatomical structures, investigate the mechanisms,	CAN	MK	K	PER,L_	VV-Viva,P	F&S	II	-	NLHT27.5

CO2, CO4	classify the types, interpret the clinical signs, apply diagnostic techniques, devise management strategies, evaluate complications, and integrate rehabilitation and physiotherapy for shoulder and elbow dislocations.				VC,TUT,PL,SDL	P-Practical, INT,P-EXAM,PRN				
CO1, CO2, CO4	Explain how to assess accurately and diagnose bone and joint injuries, ensuring appropriate diagnosis and treatment.	PSY-GUD	MK	K	DIS,TUT	PRN,P-EXAM,P-ID	F	II	-	NLHP27.1
CO1, CO2, CO4	Explain how to assess accurately and diagnose injuries of the Wrist, Elbow, Shoulder, Ankle, Knee, and Hip joints, ensuring appropriate diagnosis and treatment.	CAN	MK	KH	PER,DIS,CD,SIM,D-BED	PRN,P-VIVA,CL-PR, Mini-CEX,CHK	F&S	II	-	NLHP27.2
CO1, CO2, CO4	Demonstrate and provide hands-on training on the application of skin and skeletal traction, ensuring proper technique and safety measures.	PSY-GUD	MK	KH	D-BED, PER,BL,RP,D	DEB,CL-PR,VV-Viva, P-VIVA,PRN	F&S	II	-	NLHP27.3
CO1, CO2, CO4	Demonstrate and provide immediate and appropriate first aid care to patients with fractures, minimizing complications and ensuring proper stabilization until further treatment can be obtained.	PSY-GUD	MK	K	CBL,SDL,DIS,PER,SIM	P-EXAM,P-VIVA, C-VC,INT,PRN	F&S	II	-	NLHP27.4

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 27.1	Fracture of scapula & clavicle	**Anatomy Lab**: Hands-on sessions with anatomical models to study the scapula and clavicle. Identify and label anatomical landmarks important for understanding fractures. Mechanism of Injury Workshop: Use case studies to explore different injury mechanisms. Students discuss and simulate scenarios that could lead to fractures. Clinical Examination Practice: Role-play patient scenarios to practice identifying signs and symptoms of fractures. Discuss differential diagnoses based on clinical presentations.

		Radiology Session: Review and interpret X-rays and CT scans of scapula and clavicle fractures. Discuss how to identify different types of fractures and their implications. Treatment Planning: Develop treatment plans for various fracture scenarios. Discuss the pros and cons of conservative vs. surgical management. Rehabilitation Planning: Create rehabilitation plans for patients post-fracture. Discuss the timeline and goals of physiotherapy sessions.
NLHT 27.2	Clinical features, Diagnosis, Complications, and Management of Femur & Patella	**Anatomy Lab**: Hands-on sessions with anatomical models or cadaveric specimens to study the femur and patella. Identify and label anatomical landmarks important for understanding fractures. **Mechanism of Injury Workshop**:Use case studies to explore different injury mechanisms. Students discuss and simulate scenarios leading to fractures. **Clinical Examination Practice**:Role-play patient scenarios to practice identifying signs and symptoms of fractures. Discuss differential diagnoses based on clinical presentations. **Radiology Session**:Review and interpret X-rays, MRIs, and CT scans of femur and patella fractures. Discuss how to identify different types of fractures and their implications. **Treatment Planning**:Develop treatment plans for various fracture scenarios. Discuss the pros and cons of conservative vs. surgical management. **Rehabilitation Planning**:Create rehabilitation plans for patients post-fracture. Discuss the timeline and goals of physiotherapy sessions.
NLHT 27.3	Clinical features, Diagnosis, Complications, and Management of Tibia and Pelvic bones	**Clinical Examination Workshops**: Practice physical examination techniques to identify signs and symptoms of tibia and pelvis conditions. Use mannequins or simulated patients for hands-on learning.

		Radiology Sessions: Review and interpret radiographic images of tibia and pelvis fractures and pathologies. Discuss case studies to apply diagnostic criteria. **Case Studies and Group Discussions**: Present real-life case studies with detailed histories and diagnostic data. Group discussions to develop diagnosis, treatment plans, and management strategies. **Complication Analysis**: Analyze potential complications from case studies. Discuss management strategies for preventing and addressing these complications. **Treatment Planning**: Develop detailed treatment plans for various scenarios involving tibia and pelvis fractures or diseases. Debate the pros and cons of conservative vs. surgical management options. **Rehabilitation Workshops**: Create and discuss rehabilitation protocols for post-fracture care. Hands-on sessions on physiotherapy techniques and their importance in recovery.
NLHT 27.4	Dislocation of joints	**Anatomy and Physiology Review**: Conduct hands-on sessions with anatomical models to study the joints and understand their structures. Highlight key anatomical features relevant to dislocation. **Clinical Examination Practice**: Role-play patient scenarios to identify clinical signs and symptoms of various joint dislocations. Discuss the differential diagnosis based on clinical presentation. **Radiology Interpretation**: Review X-rays and MRIs of joint dislocations. Practice interpreting these images to diagnose different types of dislocations. **Case Study Analysis**: Present real-life case studies of joint dislocations. Students analyze the cases to identify clinical features, diagnostic methods, and possible complications.

NLHT 27.5	Management of Shoulder & Elbow Dislocation	**Anatomy Review Sessions**: Use anatomical models or cadaveric specimens to study the shoulder and elbow joints. Identify key anatomical landmarks relevant to dislocation and reduction. **Clinical Examination Practice**: Role-play scenarios to practice recognizing signs and symptoms of shoulder and elbow dislocations. Discuss differential diagnoses and perform physical examinations. **Radiology Workshops**: Review and interpret X-rays and MRIs of shoulder and elbow dislocations. Practice identifying different types of dislocations and associated injuries. **Reduction Technique Demonstrations**: Demonstrate various reduction techniques on mannequins or models. Students practice these techniques under supervision to ensure proper understanding and execution. **Case Study Discussions**: Analyze case studies of patients with shoulder and elbow dislocations. Develop comprehensive management plans, including reduction, post-reduction care, and rehabilitation.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 27.1	Examination of the Bone and Joint injuries	**Steps:** **Preparation:** Gather materials: Gloves, stethoscope, measuring tape, goniometer, and reflex hammer. Ensure the patient is comfortably seated or lying down, with the affected area exposed. **Initial History:** Take a thorough history, including the mechanism of injury, symptoms (pain, swelling, deformity), and any previous injuries or conditions. Ask about medical history, including bone or joint disorders (e.g., osteoporosis, arthritis). **Inspection:**

		Observe the affected area for swelling, bruising, deformity, or any visible wounds. Note any asymmetry compared to the unaffected side. **Palpation:** Gently palpate the bone and joint for tenderness, swelling, and temperature. Assess for crepitus (grating sensation) which may indicate a fracture. Check for joint effusion (fluid buildup). **Range of Motion:** Ask the patient to perform active and passive movements to assess the range of motion. Use a goniometer to measure joint angles accurately. Note any limitations, pain, or instability during movement. **Strength Testing:** Evaluate muscle strength around the affected joint using a grading system (0-5). Compare strength in both limbs to identify asymmetry. **Special Tests:** Perform specific tests for different joints: e.g., Lachman test for ACL injuries in the knee, Hawkins-Kennedy test for shoulder impingement. Assess for ligamentous stability, meniscal injuries, and other soft tissue damage. **Neurological Examination:** Assess sensory and motor function to rule out nerve involvement. Check reflexes using a reflex hammer. **Imaging and Further Tests:** Recommend imaging studies such as X-rays, MRI, or CT scans to confirm diagnosis and assess the extent of the injury. Consider blood tests if infection or inflammatory conditions are suspected. **Documentation:** Record all findings, noting any abnormalities in bone alignment, joint stability, and range of motion. Discuss potential diagnoses and further investigations if needed.
NLHP 27.2	Examination of Injuries about Individual Joints	**wrist Joint**

Steps:

1. **Preparation:**
    - Gather materials: Gloves, measuring tape, goniometer, and reflex hammer.
    - Ensure the patient is comfortably seated with the wrist exposed.
2. **Inspection:**
    - Observe for swelling, bruising, deformity.
    - Note any asymmetry or skin changes.
3. **Palpation:**
    - Palpate the wrist for tenderness, swelling, and crepitus.
    - Check for temperature differences.
4. **Range of Motion:**
    - Assess active and passive range of motion (flexion, extension, radial/ulnar deviation).
5. **Special Tests:**
    - Finkelstein's test for De Quervain's tenosynovitis.
    - Tinel's sign and Phalen's test for carpal tunnel syndrome.

Elbow Examination

Steps:

1. **Preparation:**
    - The patient is seated with the elbow exposed.
2. **Inspection:**
    - Check for swelling, deformity, and scars.
    - Note asymmetry.
3. **Palpation:**
    - Palpate for tenderness, and swelling around the joint.
    - Check for temperature differences.
4. **Range of Motion:**

- Assess flexion, extension, supination, pronation.

5. **Special Tests:**
    - Varus and valgus stress tests for ligament integrity.
    - Tinel's sign for ulnar nerve compression.

Shoulder Examination
Steps:

1. **Preparation:**
    - The patient is seated with their shoulder exposed.
2. **Inspection:**
    - Observe for atrophy, asymmetry, and deformity.
3. **Palpation:**
    - Palpate for tenderness in the Shoulder girdle and acromioclavicular joint.
    - Check for warmth and swelling.
4. **Range of Motion:**
    - Assess active/passive movements: flexion, extension, abduction, adduction, internal/external rotation.
5. **Special Tests:**
    - Hawkins-Kennedy test for impingement.
    - Apprehension test for instability.
    - Drop arm test for rotator cuff tear.

Knee Examination
Steps:

1. **Preparation:**
    - Patient seated or lying with knee exposed.
2. **Inspection:**

- Check for swelling, deformity, and scars.
- Note asymmetry.

3. **Palpation:**
    - Palpate for tenderness, warmth, and swelling.
4. **Range of Motion:**
    - Assess flexion and extension.
5. **Special Tests:**
    - Lachman test for ACL integrity.
    - McMurray test for meniscal injury.
    - Varus and valgus stress tests for ligament stability.

Hip Examination

Steps:

1. **Preparation:**
    - The patient is lying down with the hip exposed.
2. **Inspection:**
    - Observe for asymmetry, atrophy, and deformity.
3. **Palpation:**
    - Palpate for tenderness in the hip joint, greater trochanter.
    - Check for warmth and swelling.
4. **Range of Motion:**
    - Assess flexion, extension, abduction, adduction, internal/external rotation.
5. **Special Tests:**
    - Trendelenburg test for gluteal muscle strength.
    - FABER test for hip joint pathology.

Ankle Examination

Steps:

		1. **Preparation:** • Patient seated or lying with ankle exposed. 2. **Inspection:** • Check for swelling, bruising, and deformity. • Note asymmetry. 3. **Palpation:** • Palpate for tenderness, warmth, and swelling. 4. **Range of Motion:** • Assess dorsiflexion, plantarflexion, inversion, eversion. 5. **Special Tests:** • Anterior drawer test for ankle stability. • Thompson test for Achilles tendon rupture.
NLHP 27.3	Hands on training on traction (skin and skeletal)	**Steps:** 1. **Preparation:** • Gather materials: Traction equipment (skin traction setup, skeletal traction setup), gloves, gauze, bandages, weights, and a traction table. • Ensure the patient is comfortably positioned on the traction table. 2. **Skin Traction:** • **Preparation:** ◦ Explain the procedure to the patient and obtain informed consent. ◦ Gather all necessary materials and ensure they are sterile. • **Application:** ◦ Clean and dry the skin area where traction will be applied. ◦ Apply adhesive tape to the skin to create a secure base. ◦ Attach the traction bandage to the adhesive tape and connect it to the traction setup. ◦ Gradually apply weights to achieve the desired traction force. ◦ Monitor the patient for any signs of discomfort or complications. 3. **Skeletal Traction:**

		• **Preparation:**
		  ◦ Explain the procedure to the patient and obtain informed consent.
		  ◦ Gather all necessary materials and ensure they are sterile.
		• **Application:**
		  ◦ Position the patient on the traction table and align the affected limb.
		  ◦ Insert a pin or wire into the bone under sterile conditions.
		  ◦ Attach the traction setup to the pin or wire and gradually apply weights to achieve the desired traction force.
		  ◦ Monitor the patient for any signs of discomfort or complications.
		4. **Monitoring and Care:**
		• Regularly check the traction setup to ensure it is functioning correctly.
		• Monitor the patient for signs of infection, pressure sores, or nerve damage.
		• Adjust weights and traction as needed based on the patient's condition and progress.
		5. **Documentation:**
		• Record all steps taken during the application of traction, including weights used, patient positioning, and any complications encountered.
		• Document the patient's response to traction and any changes in their condition.

NLHP 27.4	First aid management of fracture cases	**Steps:** 1. **Preparation:** • Gather materials: First aid kit, sterile gauze, bandages, splints (or improvised splints like cardboard), cold packs, gloves. • Ensure the patient is in a safe and stable environment. 2. **Initial Assessment:** • Perform a primary survey (ABCs: Airway, Breathing, Circulation) to ensure no life-threatening conditions. • Assess the patient for signs of shock (pale skin, rapid pulse, shallow breathing). 3. **Immobilization:** • **Identify the fracture:** Look for swelling, deformity, bruising, laceration etc or abnormal movement.

- **Support the injured area:** If possible, support the fracture with your hands to prevent further movement.
- **Apply a splint:** Use a splint to immobilize the joints above and below the fracture site.
    - For an upper limb fracture, support the arm in a sling.
    - For a lower limb fracture, splint the leg in a straight position using rigid materials.
- **Secure the splint:** Use bandages or cloth strips to secure the splint without cutting off circulation.

4. **Pain Management:**
    - Apply a cold pack to the affected area to reduce swelling and pain. Do not apply ice directly to the skin; use a cloth or towel as a barrier.
5. **Wound Care (if open fracture):**
    - Cover any open wounds with sterile gauze to prevent infection.
    - Avoid trying to push any protruding bones back into place.
6. **Monitor and Reassure:**
    - Continuously monitor the patient's vital signs and condition.
    - Keep the patient calm and reassured.
7. **Transport to Medical Facility:**
    - Arrange for transport to a medical facility as quickly and safely as possible.
    - Avoid unnecessary movement of the injured limb during transport.

Topic 28 Asthi Sandhi Vikara (Diseases of Bone and Joints) (LH :2 NLHT: 2 NLHP: 6)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO3, CO5	Describe Aetiopathogenesis, Classification, Clinical features, Diagnosis, and Complications of Osteomyelitis	CAP	MK	K	L&PPT ,L	OSPE,P-CASE,PRN, OSCE,P-EXAM	F&S	II	H-KC,V-RN	LH
CO1, CO2, CO4	Explain Aetiopathogenesis, Classification, Clinical features, Diagnosis, Treatment and Complications of Cysts, Tumours	CC	DK	K	L_VC,L &GD,P T,TUT,	P-VIVA,P-EXAM,OSPE,CL-PR,	F&S	II	-	NLHT28.1

					CD	C-VC				
CO1, CO2, CO4	Explain Aetiopathogenesis, Classification, Clinical features, Diagnosis, Treatment, and Complications of Tuberculosis of bone.	CC	MK	K	L&PPT ,L	CL-PR,P-VIVA,QZ ,INT,PRN	F&S	II	-	LH
CO1, CO2, CO5	Explain Aetiopathogenesis, Classification, Clinical features, Diagnosis, Treatment, and Complications of Osteoporosis, Paget’s disease	CC	MK	K	FC,PBL ,SDL,C BL,D-BED	P-VIVA,P-PS,RK,VV-Viva,P-EXAM	F&S	II	-	NLHT28.2
CO1, CO2, CO4	Explain how to assess accurately and diagnose diseases affecting t he bones, ensuring proper diagnosis and management.	CC	MK	K	PBL,RP ,X-Ray, TUT,DI S	P-RP,QZ ,PRN, C-V C,P-EXAM	F&S	II	-	NLHP28.1
CO1, CO3, CO5	Explain how to assess accurately and diagnose joints for signs of pathology such as inflammation, degeneration, or structural abnormalities, enabling accurate diagnosis and effective treatment.	CC	MK	K	X-Ray, D-BED, CBL,PT ,DIS	OSPE,PRN, P-EXAM,P -VIVA,P-CASE	F&S	II	-	NLHP28.2
CO1, CO3, CO5	Explain how to assess accurately and diagnose the foot for any ab normalities, injuries, or conditions affecting the bones, joints, mus cles, tendons, and skin	CC	MK	K	D-M,PL ,DIS,X-Ray,PE R	VV-Viva,OSPE, C-VC,P-EX AM,PP-Practical	F&S	II	-	NLHP28.3

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 28.1	Diagnosis, Treatment & Complications of Cysts, Tumours of bones	1. **Case Study Analysis:** ◦ Provide detailed case studies of patients with bone cysts and tumors.

- Students identify and explain the aetiopathogenesis, classification, clinical features, diagnosis, and potential complications.
- Encourage group discussion and collaborative learning to explore different aspects of each case.

2. **Anatomical Models and Specimens:**
   - Use anatomical models and specimens to show the locations and structures of common bone cysts and tumors.
   - Allow students to examine these models to better understand the anatomical context.
3. **Interactive Presentations:**
   - Assign each student or group a specific type of bone cyst or tumor.
   - Have them create and present comprehensive reports covering all aspects, including visual aids like diagrams and slides.
4. **Diagnostic Imaging Workshops:**
   - Conduct workshops on the interpretation of diagnostic imaging (X-ray, CT scan, MRI, bone scans).
   - Provide sample images of bone cysts and tumors for analysis.
   - Discuss the role of imaging in diagnosing and differentiating between different types of lesions.
5. **Role-Playing and Simulation:**

- Use patient simulators or role-playing exercises to practice clinical examination techniques.
- Simulate scenarios where students must diagnose and suggest treatment plans for patients presenting with bone cysts or tumors.
- Provide feedback and discuss the decision-making process.

6. **Group Discussions and Debates:**
   - Organize group discussions or debates on topics related to bone cysts and tumors, such as treatment options and prognosis.
   - Encourage critical thinking and evidence-based argumentation.
7. **Problem-Based Learning (PBL):**
   - Implement PBL sessions where students are given clinical problems related to bone cysts or tumors.
   - Have them research and present their findings and proposed solutions.
   - Facilitate discussions to reinforce learning points.
8. **Guest Lectures and Expert Talks:**
   - Invite orthopedic oncologists and radiologists to give lectures on their experiences with bone cysts and tumors.
   - Allow students to ask questions and interact with the experts.

NLHT 28.2	Osteoporosis and Paget's disease	1. **Case Study Analysis:** ◦ Provide detailed case studies of patients with Osteoporosis and Paget’s disease. ◦ Students analyze and identify the clinical features, diagnosis, and potential complications. ◦ Facilitate group discussions to explore different aspects of each case. 2. **Interactive Presentations:** ◦ Assign each student or group a specific topic related to Osteoporosis or Paget’s disease. ◦ Have them create and present comprehensive reports covering clinical features, diagnostic methods, and complications, using visual aids like diagrams and slides. 3. **Group Discussions and Debates:** ◦ Organize group discussions or debates on topics related to Osteoporosis and Paget’s disease, such as prevention strategies and treatment options. ◦ Encourage critical thinking and evidence-based argumentation. 4. **Problem-Based Learning (PBL):** ◦ Implement PBL sessions where students are given clinical problems related to Osteoporosis and Paget’s disease. ◦ Have them research and present their findings and proposed solutions. ◦ Facilitate discussions to reinforce learning points.

		5. **Guest Lectures and Expert Talks:** ◦ Invite endocrinologists and orthopedic specialists to give lectures on their experiences with Osteoporosis and Paget's disease. ◦ Allow students to ask questions and interact with the experts. 6. **Complication Analysis:** ◦ Provide scenarios where students must identify and manage complications of Osteoporosis (e.g., fractures) and Paget's disease (e.g., bone deformities, arthritis). ◦ Discuss the long-term implications and management strategies
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 28.1	Demonstrate Examination of the diseases of bone	**Steps:** 1. **Preparation:** • Gather materials: Gloves, measuring tape, stethoscope, reflex hammer, and imaging requisition forms. • Ensure the patient is comfortably seated or lying down, with the affected area exposed. 2. **Initial History:** • Take a thorough history including symptoms (pain, swelling, deformity), duration, and any aggravating or relieving factors. • Ask about medical history, including osteoporosis, fractures, infections, or metabolic bone diseases. 3. **Inspection:**

- Observe the affected area for swelling, deformity, redness, or atrophy.
- Note any asymmetry, visible scars, or previous surgical marks.

4. **Palpation:**
    - Gently palpate the bones for tenderness, swelling, warmth, and irregularities.
    - Assess for crepitus (grating sensation) which may indicate fractures or degenerative changes.
5. **Range of Motion:**
    - Assess the range of motion in adjacent joints to check for any limitations or pain.
    - Use a goniometer to measure joint angles accurately.
6. **Strength Testing:**
    - Evaluate the strength of muscles attached to the affected bones by asking the patient to perform specific movements against resistance.
    - Compare strength on both sides.
7. **Special Tests:**
    - Perform specific tests to assess bone integrity:
        - **Percussion:** Tap the bone gently to check for tenderness or pain.
        - **Compression Test:** Apply gentle pressure along the bone axis to assess for pain indicating a fracture.
        - **Long Bone Palpation:** Palpate the entire length of long bones to identify any abnormalities or discontinuities.
8. **Neurological Examination:**
    - Assess sensation and motor function in the affected limb to rule out nerve involvement.
    - Check reflexes using a reflex hammer.
9. **Imaging and Further Tests:**
    - Recommend imaging studies such as X-rays, MRI, CT scans, or bone scans to confirm diagnosis and assess the extent of the disease.
    - Consider bone density testing (DEXA scan) for osteoporosis.
    - Conduct relevant blood tests to check for metabolic bone diseases (e.g., calcium, phosphate, alkaline phosphatase levels).
10. **Documentation:**
    - Record all findings, noting any abnormalities in structure, function, or movement.

		• Discuss potential diagnoses and further investigations if needed.
NLHP 28.2	Examination of pathological joints	**Steps:** 1. **Preparation:** • Gather materials: Gloves, measuring tape, goniometer, reflex hammer, and a penlight. • Ensure the patient is comfortably seated or lying down, with the affected joint exposed. 2. **Initial History:** • Take a thorough history, including symptoms (pain, stiffness, swelling), duration, and any aggravating or relieving factors. • Ask about medical history, including arthritis, trauma, infections, or autoimmune diseases. 3. **Inspection:** • Observe the joint for swelling, redness, deformity, or atrophy. • Note any asymmetry between joints. • Check for skin changes such as rashes or nodules. 4. **Palpation:** • Gently palpate the joint for tenderness, warmth, and swelling. • Assess for crepitus (grating sensation) which may indicate degenerative changes. • Evaluate the surrounding muscles and soft tissues for abnormalities. 5. **Range of Motion:** • Ask the patient to perform active movements, noting any pain or limitations. • Perform passive movements and measure the range of motion using a goniometer. • Compare the range of motion with the unaffected joint. 6. **Strength Testing:** • Evaluate muscle strength around the joint by asking the patient to perform specific movements against resistance. • Compare strength in both limbs. 7. **Special Tests:** • Perform specific tests based on the joint being examined:

		◦ **Knee:** Lachman test for ACL integrity, McMurray test for meniscal injuries. ◦ **Shoulder:** Hawkins-Kennedy test for impingement, Apprehension test for instability. ◦ **Elbow:** Varus and valgus stress tests for ligament integrity. ◦ **Wrist:** Phalen's test for carpal tunnel syndrome, Finkelstein's test for De Quervain's tenosynovitis. ◦ **Hip:** Trendelenburg test for gluteal muscle strength, FABER test for hip pathology. 8. **Neurological Examination:** • Assess sensation and motor function in the affected limb to rule out nerve involvement. • Check reflexes using a reflex hammer. 9. **Imaging and Further Tests:** • Recommend imaging studies such as X-rays, MRI, or CT scans to confirm diagnosis and assess the extent of joint pathology. • Consider blood tests to check for inflammatory markers or autoimmune diseases (e.g., ESR, CRP, rheumatoid factor). 10. **Documentation:** • Record all findings, noting any abnormalities in structure, function, or movement. • Discuss potential diagnoses and further investigations if needed.
NLHP 28.3	Examination of foot	**Steps:** 1. **Preparation:** • Gather materials: Gloves, measuring tape, goniometer, reflex hammer, and a flashlight. • Ensure the patient is comfortably seated or lying down with feet exposed. 2. **Initial History:** • Take a thorough history including symptoms (pain, swelling, numbness), duration, and any aggravating or relieving factors. • Ask about medical history including diabetes, arthritis, or previous foot injuries. 3. **Inspection:**

- Observe the feet for swelling, redness, bruising, deformities, or skin changes.
- Note any asymmetry between the feet.
- Check the condition of the nails and the presence of any calluses or ulcers.

4. **Palpation:**
   - Gently palpate the foot for tenderness, warmth, and swelling.
   - Assess the bones, joints, and soft tissues for any abnormalities.
   - Check for the presence of any masses or deformities.
5. **Range of Motion:**
   - Ask the patient to perform active movements such as dorsiflexion, plantarflexion, inversion, and eversion.
   - Assess the range of motion and note any pain or limitations.
   - Use a goniometer to measure joint angles accurately.
6. **Strength Testing:**
   - Evaluate the muscle strength of the foot and ankle by asking the patient to perform specific movements against resistance.
   - Compare strength in both feet.
7. **Special Tests:**
   - **Thompson Test:** Squeeze the calf muscle to assess for Achilles tendon rupture.
   - **Tinel's Sign:** Tap over the tarsal tunnel to check for nerve irritation.
   - **Homan's Sign:** Dorsiflex the foot to check for deep vein thrombosis.
   - **Windlass Test:** Dorsiflex the big toe to assess for plantar fasciitis.
8. **Neurological Examination:**
   - Assess sensation in different areas of the foot to check for neuropathy.
   - Test reflexes using a reflex hammer.
9. **Gait Analysis:**
   - Observe the patient's walking pattern to identify any structural or functional abnormalities.
   - Note any limping, uneven wear on shoes, or altered gait mechanics.
10. **Documentation:**
    - Record all findings, noting any abnormalities in structure, function, or movement.
    - Discuss potential diagnoses and further investigations if needed.

Topic 29 Shirobhighata (Cranio-cerebral Injurie/ Disorders) (LH :2 NLHT: 1 NLHP: 2)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO1, CO3, CO5	Explain Scalp injuries and Skull Fracture and their management	CC	MK	K	L,L&PPT	VV-Viva,CL-PR,PRN	F&S	II	-	LH
CO1, CO3, CO5	Explain Brain injury (Mastulunga Abhighaata) - Cerebral concussion, Contusion and Laceration. Haemorrhage & its management - Acute Extradural haematoma, Acute Intracerebral and Chronic Subdural Haematoma	CC	MK	K	L,L&PPT	VV-Viva,P-RP,PRN,INT,QZ	F&S	II	-	LH
CO1, CO3, CO5	Elaborate on Brain tumuors and their management	CC	DK	K	BS,BL,RP,TUT,DIS	VV-Viva,QZ ,DEB,P-VIVA	F&S	II	-	NLHT29.1
CO1, CO3, CO5, CO6	Explain how to assess accurately and diagnose Head injuries, ensuring their appropriate primary management and treatment to prevent complications.	CC	DK	KH	CD,PBL,DIS,TUT,BL	VV-Viva,SP,P-ID,P-RP,PRN	F&S	II	-	NLHP29.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 29.1	Brain tumours and their management	1. **Interactive Presentations**: Use slideshows or videos to explain what brain tumors are, their types, symptoms, diagnosis, and treatment options1. You can include real-life case studies to make it more relatable. 2. **Role-Playing Scenarios**: Have students role-play as doctors, patients, and family members to understand the emotional and medical challenges associated with brain tumors. This can help develop empathy and communication skills.

		3. **Guest Speakers**: Invite healthcare professionals who specialize in neurology or oncology to speak about their experiences and advancements in brain tumor treatment. 4. **Simulation Exercises**: Use medical simulation tools or apps to allow students to perform virtual brain surgeries or diagnostic tests, giving them hands-on experience in a controlled environment. 5. **Discussion and Reflection**: Facilitate group discussions where students can share their thoughts and feelings about what they've learned. Encourage them to reflect on how they can support individuals affected by brain tumors.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 29.1	Examination of Head Injuries (Shirobhighaata)	**Steps:** 1. Preparation: • Gather materials: Gloves, penlight, stethoscope, reflex hammer, sterile gauze, and bandages. • Ensure the patient is lying down or seated comfortably with good lighting. 2. Initial History: • Take a detailed history, including the mechanism of injury, time of injury, and any immediate symptoms (loss of consciousness, headache, dizziness, nausea). • Ask about previous head injuries or underlying medical conditions. 3. Initial Assessment: • Perform a primary survey (ABCs: Airway, Breathing, Circulation) to ensure no life-threatening conditions. • Check the patient’s Glasgow Coma Scale (GCS) score to assess the level of consciousness.

		4. Inspection: • Observe the head and face for visible injuries, swelling, bruising, or deformities. • Look for signs of external bleeding or cerebrospinal fluid leakage from the ears or nose. • Check for any scalp lacerations or hematomas. 5. Palpation: • Gently palpate the skull for tenderness, depression, or crepitus. • Assess the facial bones for any fractures or deformities. 6. Neurological Examination: • Assess the pupils for size, equality, and reactivity to light. • Test cranial nerve function, including eye movement, facial sensation, and muscle strength. • Evaluate motor and sensory function in the limbs to check for any deficits. • Assess reflexes using a reflex hammer. 7. Cognitive and Memory Assessment: • Ask the patient questions to assess orientation (time, place, person). • Test short-term and long-term memory by asking about recent events and past information. 8. Balance and Coordination: • Perform tests to assess balance and coordination, such as the Romberg test and finger-to-nose test. • Observe for any signs of ataxia or unsteadiness. 9. Imaging and Further Tests: • Recommend imaging studies such as CT scans or MRI if there is suspicion of intracranial injury. • Conduct additional tests if indicated, such as blood tests to check for metabolic or hematologic abnormalities. 10. Documentation: • Record all findings, noting any abnormalities in structure, function, or cognitive status. • Discuss potential diagnoses and further investigations if needed.
Topic 30 Kasheruka Vikara (Diseases of Spine) (LH :1 NLHT: 1 NLHP: 4)		

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO3, CO4, CO5	Explain the Mechanism, Pathology, Classification, Investigations, Complications and management of Tuberculosis of the spine	CC	MK	K	L&PPT ,L,DIS	T-CS,QZ , C-VC,OSCE,PRN	F&S	II	-	LH
CO1, CO3, CO5	Demonstrate the Mechanism, Pathology, Classification, Investigations, Complications and management of Ankylosing Spondylitis	PSY-GUD	MK	K	PBL,TUT,BS,RLE,X-Ray	VV-Viva,T-CS,QZ ,P-VIVA,PRN	F&S	II	H-PK	NLHT30.1
CO1, CO2, CO4, CO6	Demonstrate accurate assessment and diagnosis of spinal injuries and abnormalities, ensuring appropriate management and treatment to prevent further complications.	PSY-GUD	MK	K	TUT,DIS,CBL, X-Ray,SIM	DEB,INT,P-VIVA,SP, PRN	F&S	II	H-KC,H-PK	NLHP30.1
CO1, CO3, CO4	Explain the skills to stabilize neck fractures using the log roll technique ensuring safety and proper spinal alignment during patient transfer.	CC	MK	KH	RP,X-Ray,CBL, EDU,PER	P-EXAM,PRN,QZ , C-VC,P-VIVA	F&S	II	-	NLHP30.2

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 30.1	Ankylosing Spondylitis	1. **Case Study Analysis**: Provide students with a detailed case study of a patient with Ankylosing Spondylitis. Ask them to analyze the patient's symptoms, medical history, and diagnostic tests to understand the pathology and classification of the disease. 2. **Role-Playing**: Have students role-play as rheumatologists and patients. The "rheumatologists" can conduct a mock patient interview, perform a physical examination, and discuss potential

		management plans. 3. **Diagnostic Test Simulations**: Use simulation tools or apps to allow students to perform virtual diagnostic tests, such as X-rays or MRIs, to identify signs of Ankylosing Spondylitis. 4. **Group Discussions**: Facilitate group discussions where students can share their thoughts on the challenges of diagnosing and managing Ankylosing Spondylitis. Encourage them to think critically about the latest research and treatment options. 5. **Guest Speakers**: Invite healthcare professionals who specialize in rheumatology to speak about their experiences and advancements in the treatment of Ankylosing Spondylitis. 6. **Poster Presentations**: Have students create posters summarizing the key points about Ankylosing Spondylitis, including its mechanism, pathology, classification, investigations, complications, and management. They can present these posters to the class.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 30.1	Examination of Spinal Injuries and Abnormalities	**Steps:** 1. **Preparation:** • Gather materials: Gloves, measuring tape, reflex hammer, penlight, and stethoscope. • Ensure the patient is comfortably seated or lying down with the spine exposed. 2. **Initial History:** • Take a detailed history, including the mechanism of injury, duration of symptoms (pain, numbness, weakness), and any aggravating or relieving factors. • Ask about previous spinal injuries or surgeries and any underlying medical conditions. 3. **Inspection:** • Observe the spine for visible deformities, swelling, bruising, or muscle atrophy.

		• Note the patient's posture, alignment, and any abnormal curvatures (scoliosis, kyphosis, lordosis). 4. **Palpation:** • Gently palpate the spine from the cervical to the lumbar region, checking for tenderness, swelling, or muscle spasms. • Assess the spinous processes and paraspinal muscles for any abnormalities. 5. **Range of Motion:** • Ask the patient to perform movements such as flexion, extension, lateral bending, and rotation. • Evaluate the range of motion and note any pain or limitations. 6. **Neurological Examination:** • **Sensation:** Assess sensory function by testing light touch, pinprick, and vibration in the dermatomes. • **Motor Function:** Evaluate muscle strength in the upper and lower extremities using a grading system (0-5). • **Reflexes:** Check deep tendon reflexes (biceps, triceps, patellar, Achilles) and note any abnormalities. • **Special Tests:** Perform tests like the straight leg raise (for sciatica) and Spurling's test (for cervical radiculopathy). 7. **Gait and Balance:** • Observe the patient's walking pattern to identify any abnormalities. • Perform tests like the Romberg test to assess balance and coordination. 8. **Imaging and Further Tests:** • Recommend imaging studies such as X-rays, MRI, or CT scans to confirm diagnosis and assess the extent of the injury or abnormality. • Conduct additional tests like electromyography (EMG) if nerve damage is suspected. 9. **Documentation:** • Record all findings, noting any abnormalities in structure, function, or movement. • Discuss potential diagnoses and further investigations if needed.
NLHP 30.2	Hands-on training on 3 stages of neck fracture stabilization with logroll	**Steps:** Stage 1: Preparation

		1. Assess the patient: Confirm the patient's responsiveness, breathing, and address any severe bleeding. 2. Gather a team: Ensure you have at least three assistants to perform the log roll safely. 3. Position the patient: Have the patient lie flat on their back. Stage 2: Immobilization 1. Manual traction: The person at the patient's head stabilizes the neck by applying gentle traction. 2. Cervical collar: If available, apply a cervical collar to further immobilize the neck. 3. Prepare for log roll: Clearly explain each team member's role in the maneuver. Stage 3: Execution 1. Coordinate the roll: On a count of three, the team rolls the patient towards themselves, maintaining alignment of the head, neck, and spine. 2. Transfer to a spine board: Once rolled, carefully transfer the patient to a spine board for further stabilization and transport.

Topic 31 Stana Roga (Diseases of Breast) (LH :1 NLHT: 2 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO3, CO5	Explain Aetiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management of Sthana Vidradhi - Breast abscess	CC	MK	K	SIM,DIS,L_VC,TUT,PER	COM,PP-Practical,CL-PR,P-VIVA,P-EXAM	F&S	II	-	NLHT31.1
CO1,	Explain Aetiopathogenesis, Classification, Clinical Features,	CK	MK	K	SIM,CD	CL-PR,P-E	F&S	II	-	NLHT31.2

CO3, CO5	Diagnosis, Complications and Management of Fibroadenoma and Fibroadenosis				,L&PPT ,D-BED ,DIS	XAM,P-CA SE,P-VIVA ,VV-Viva				
CO1, CO3, CO4, CO5	Define Aetiopathogenesis, Classification, Clinical Features, Diagnosis, Complications, and Management of Stana Arbuda & Breast tumours and their Management.	CK	MK	K	BL,L&P PT ,L_VC, L	DEB,PUZ, QZ ,VV-Viva,T-CS	F&S	II	-	LH
CO1, CO3, CO4, CO5	Demonstrate the skills to conduct a clinical breast examination, educate patients on how to perform self-breast examinations at home & promote early detection of breast abnormalities.	PSY-GUD	MK	K	BL,PBL ,TUT,D IS,PER	P-EXAM,S P,C-INT, C-VC,QZ	F&S	II	-	NLHP31.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 31.1	Sthana Vidradhi - Breast abscess	1. **Interactive Case Studies**: Present detailed case studies that cover the aetiopathogenesis, classification, clinical features, diagnosis, complications, and management of breast abscesses. Have students analyze and discuss these cases in small groups. 2. **Hands-On Workshops**: Use medical models or simulations to teach students about the physical examination of the breast and techniques for diagnosing and managing abscesses. This practical approach can be very enlightening. 3. **Guest Lectures**: Invite medical professionals such as surgeons or infectious disease specialists to speak about their experiences and advancements in the treatment of breast abscesses. 4. **Poster Sessions**: Have students create educational posters that summarize the key aspects of breast abscesses, including aetiopathogenesis, classification, clinical features, diagnosis, complications, and management. They can present these posters in a mini-conference format. 5. **Debate Sessions**: Organize debates on controversial or emerging topics related to breast

		abscesses, such as antibiotic resistance or new surgical techniques. This can encourage critical thinking and engagement.
NLHT 31.2	Fibroadenoma and Fibroadenosis	1. **Case Studies**: Present detailed case studies covering the aetiopathogenesis, classification, clinical features, diagnosis, complications, and management of both fibroadenoma and fibroadenosis. Have students analyze and discuss these in small groups to compare and contrast. 2. **Role-Playing**: Conduct role-playing exercises where students act as healthcare professionals and patients. This can involve diagnostic interviews, physical examinations, and discussions on management plans. 3. **Histopathology Workshops**: If possible, provide slides of histopathological samples of fibroadenomas and fibroadenosis. Teach students to identify characteristic features under the microscope. 4. **Expert Talks**: Invite guest speakers, such as pathologists or oncologists, to discuss their experiences and advancements in the diagnosis and management of these conditions. 5. **Patient Education Material**: Encourage students to create brochures or videos aimed at educating patients about fibroadenoma and fibroadenosis, their diagnosis, and management options. 6. **Clinical Simulation**: Utilize medical simulation tools or apps to allow students to virtually practice diagnostic and treatment procedures for fibroadenoma and fibroadenosis.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 31.1	Examination of the breast and patient education	**Steps:**

	for ‘self-examination of breast.	Self-Examination of Breast Education 1. Explain the importance: Stress the importance of regular self-examinations for early detection of Breast abnormalities. 2. Demonstrate the technique: Show the patient how to perform a self-examination using a step-by-step approach. • Visual inspection: In front of a mirror, look for changes in size, shape, and skin texture. • Palpation in the shower: Using a soapy hand, gently palpate the breast and armpit area. • Palpation lying down: Place a pillow under the shoulder, raise the arm, and use the opposite hand to palpate the breast. 3. Frequency: Recommend performing the self-examination once a month, ideally a week after the menstrual period ends.

Topic 32 Urah Vikara (Diseases of Chest) (LH :1 NLHT: 1 NLHP: 4)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO3, CO5, CO6	Explain Aetiopathogenesis, Classification, Clinical features, Diagnosis, Complications, and Management of Chest injury, Fracture of Ribs, Pneumothorax, Haemothorax, Stove in Chest, Flail Chest & Surgical Emphysema.	CC	MK	K	L&PPT ,L	CL-PR,INT ,T-CS,PRN, VV-Viva	F&S	II	-	LH
CO1, CO3, CO5, CO6	Discuss the Aetiopathogenesis, Classification, Clinical Features, & management Diagnosis of Pleurisy, Pleural Abscess, Pleural Effusion, and Tumours of the Lung.	CC	MK	K	TPW,C D,L_VC ,RP,X-Ray	P-MOD,OS CE,PRN,O SPE,P-EXAM	F&S	II	-	NLHT32.1
CO1, CO3, CO5, CO6	Demonstrate the systematic examination of chest injuries and Elaborate on diagnostic and management skills for trauma patients.	CAP	MK	KH	D,RP,E DU,ML, PT	P-VIVA, C-VC,CL-PR, INT,P-PRF	F&S	II	-	NLHP32.1

CO1, CO3, CO5, CO6	Demonstrate the skills to perform a thorough examination of chest diseases, Identify common and uncommon chest diseases through physical examination and history taking, and elaborate on diagnostic and management skills for patients with chest diseases.	PSY-GUD	MK	K	CBL,X-Ray,DIS,CD,TUT	VV-Viva, C-VC,P-EXAM,PRN,INT	F&S	II	-	NLHP32.2

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 32.1	Examination of Pleurisy, Pleural Abscess, Pleural Effusion, Tumours of the Lung	1. **Case Study Analysis**: Break students into small groups and give each group a detailed case study involving one of the conditions (Pleurisy, Pleural Abscess, Pleural Effusion, or Lung Tumors). They'll analyze the aetiopathogenesis, classification, clinical features, diagnosis, and management. This can encourage teamwork and critical thinking. 2. **Diagnostic Role-Playing**: Students can take turns role-playing as doctors and patients. The "doctors" can interview "patients" to diagnose their condition, discussing symptoms and possible diagnostic tests. This will help students practice communication skills and clinical reasoning. 3. **Interactive Simulations**: Utilize medical simulation software or apps to let students practice diagnosing and managing these conditions in a virtual setting. This can provide a hands-on learning experience. 4. **Guest Lectures**: Invite pulmonologists, thoracic surgeons, or oncologists to share their clinical experiences and discuss advancements in the treatment of these conditions. 5. **Group Discussions**: Facilitate group discussions on the complications and management strategies for these conditions. Encourage students to share their thoughts and ask questions.

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 32.1	Examination of injuries of the chest (Urah abhigatha)	**Steps** Initial Assessment 1. Scene Safety: Ensure the environment is safe for both the patient and healthcare providers. 2. Primary Survey: Follow the ABCDE approach (Airway, Breathing, Circulation, Disability, Exposure) to assess and stabilize the patient. 3. Obtain Consent: Explain the procedure to the patient and obtain their consent, if they are conscious and able to provide it. Detailed Examination 1. Inspection: Visually inspect the chest for signs of injury such as bruising, swelling, open wounds, or deformities. 2. Palpation: Gently palpate the chest wall to identify areas of tenderness, crepitus (a crackling sensation), or step-offs in the rib contour. 3. Percussion: Tap on the chest wall to assess for dullness or hyperresonance, indicating possible fluid accumulation or pneumothorax. 4. Auscultation: Listen to breath sounds using a stethoscope to detect any abnormalities such as absent breath sounds, which might suggest pneumothorax or hemothorax. Supplementary Assessment 1. Imaging: If available, order a chest X-ray or ultrasound to get a clearer picture of the injuries. 2. Vitals Monitoring: Continuously monitor the patient's vital signs (heart rate, respiratory rate, blood pressure, oxygen saturation) to detect any deterioration.
NLHP 32.2	Examination of Diseases of the Chest	**Steps:**

		Initial Assessment 1. Patient History: Gather a comprehensive history, including symptoms such as cough, chest pain, shortness of breath, and past medical history. 2. Consent and Explanation: Explain the procedure to the patient and obtain their consent. 3. Position the Patient: Have the patient sit upright or lie down in a comfortable position. Physical Examination 1. Inspection: Observe the chest for any visible abnormalities, such as deformities, use of accessory muscles, or asymmetry. 2. Palpation: Check for tenderness, chest wall deformities, and tactile fremitus by placing hands on the chest and feeling for vibrations when the patient speaks. 3. Percussion: Tap on the chest wall to assess for areas of dullness or hyperresonance, indicating possible fluid or air in the pleural space. 4. Auscultation: Use a stethoscope to listen to breath sounds. Note any abnormal sounds such as wheezes, crackles, or diminished breath sounds. Supplementary Assessment 1. Vital Signs: Monitor vital signs, including heart rate, respiratory rate, blood pressure, and oxygen saturation. 2. Imaging: If available, order chest X-ray, CT scan, or other relevant imaging studies for further evaluation.

Topic 33 Anna Nalika Vikara (Diseases of Oesophagus) (LH :2 NLHT: 1 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3

CO1, CO3, CO5	Explain aetiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management of Congenital anomalies and Reflux Oesophagitis	CC	MK	K	L,L&GD,L&PPT	T-CS,QZ ,P-EXAM,P-VIVA	F&S	II	-	LH
CO1, CO3, CO5, CO6	Describe Aetiopathogenesis, Classification, Clinical Features, Diagnosis, Complications and management of Oesophageal Varices	CC	MK	K	PT,D,L_VC,DIS,CBL	PRN,COM,INT,QZ ,P-VIVA	F&S	II	-	NLHT33.1
CO1, CO3, CO5	Define Aetiopathogenesis, Classification, Clinical Features, Diagnosis, Complications and management of – CA of Oesophagus and their management	CK	DK	K	L,L&PPT	PP-Practical,PRN,VV-Viva,T-CS,P-EXAM	F&S	II	-	LH
CO1, CO3, CO5	Demonstrate the skills to assess and diagnose dysphagia, Identify the various causes of dysphagia through comprehensive examination techniques, and explain appropriate management and referral for patients with dysphagia.	PSY-GUD	DK	KH	TUT,CBL,W,D-BED,DIS	P-VIVA,P-RP,P-EXAM,OSCE,PRN	F&S	II	-	NLHP33.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 33.1	Examination of Oesophageal Varices	1. **Case Study Analysis**: Present detailed patient case studies, covering the aetiopathogenesis, classification, clinical features, diagnosis, complications, and management of oesophageal varices. Students can work in groups to analyze and discuss each case. 2. **Role-Playing**: Students can role-play as gastroenterologists and patients. The "doctors" can conduct mock patient interviews and physical exams, discussing potential diagnostic tests and management plans. 3. **Endoscopy Simulation**: Use videos or simulation tools to show how an endoscopy is performed and how oesophageal varices are identified and treated during the procedure.

		4. **Guest Speakers**: Invite gastroenterologists or hepatologists to speak about their experiences in diagnosing and treating oesophageal varices. They can also discuss the latest research and advancements. 5. **Group Discussions**: Facilitate group discussions on the complications and management strategies for oesophageal varices. Encourage students to share their thoughts and ask questions.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 33.1	Examination of Dysphagia	**Preparation Steps:** Patient History • Gather History: Ask about the onset, duration, and nature of swallowing difficulties. Enquire about associated symptoms like weight loss, coughing during meals, or pain while swallowing. • Medical History: Document past medical history, including any neurological disorders, head and neck surgeries, or recent infections. • Physical Examination • Oral Examination: Inspect the oral cavity for abnormalities such as lesions, dry mouth, or dental issues. • Neck Examination: Palpate the neck for any masses or lymphadenopathy. • Cranial Nerve Assessment: Evaluate the function of cranial nerves involved in swallowing (V, VII, IX, X, XII). • Swallowing Assessment: Observe the patient as they swallow water and solid food, noting any difficulties or signs of aspiration. • Supplementary Assessment

		• Videofluoroscopic Swallow Study (VFSS): If available, this imaging technique can provide detailed information on the mechanics of swallowing. • Esophagogastroduodenoscopy (EGD): For a more indepth examination of the esophagus and stomach if structural abnormalities are suspected. • Manometry: Measure the pressure within the esophagus to evaluate its function (if possible/available)

Topic 34 Gulma Roga (LH :1 NLHT: 0 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1	Explain Nidana, Prakara, Lakshana, Upadrava, and Chikitsa of Gulma	CC	MK	K	L,L&PPT	T-CS,PRN, VV-Viva	F&S	II	-	LH

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity

Topic 35 Shoola Vyadhi (LH :1 NLHT: 0 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO3, CO4	Define Nidana, Prakara, Lakshana, Upadrava and Chikitsa of Shoola	CK	DK	K	L,L&PPT	P-VIVA,VV-Viva,T-CS,PRN	F&S	II	-	LH
CO1, CO3, CO5, CO6	Demonstrate comprehensive assessment of patients presenting with acute abdominal pain, and explain potential life-threatening conditions and various causes of acute abdomen, and diagnostic and management skills for emergencies.	PSY-GUD	MK	KH	PSM,RLE,SIM,X-Ray, PER	PRN,T-CS, OSCE,CL-PR,P-VIVA	F&S	II	-	NLHP35.1

Non Lecture Hour Theory		
S.No	**Name of Activity**	**Description of Theory Activity**
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 35.1	Examination of Acute Abdomen	**Steps:** Initial Assessment 1. Patient History: Collect a detailed history of the pain, including onset, location, duration, and character. Enquire about associated symptoms like nausea, vomiting, fever, or changes in bowel habits. 2. General Observation: Assess the patient's general appearance and vital signs. Look for signs of distress, pallor, or diaphoresis. Physical Examination 1. Inspection: Observe the abdomen for distension, scars, hernias, or visible peristalsis. 2. Palpation: Perform gentle and then deeper palpation to identify areas of tenderness, rebound tenderness, guarding, or masses. 3. Percussion: Percuss the abdomen to detect areas of tenderness, dullness, or tympany. 4. Auscultation: Listen to bowel sounds in all quadrants. Note any abnormalities like hyperactive, hypoactive, or absent sounds. • Specific Signs: Check for specific signs like Murphy's sign, McBurney's point tenderness, and Rovsing's sign. Supplementary Assessment

		1. Laboratory Tests: Order relevant blood tests (e.g., complete blood count, electrolytes, liver enzymes, amylase, lipase) to aid in diagnosis. 2. Imaging: If indicated, obtain imaging studies such as abdominal X-rays, ultrasound, or CT scan to further evaluate the underlying cause.

Topic 36 Udara Roga (LH :1 NLHT: 2 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO3	Define Nidan, Prakar, Samprapti, Laxan, Chikitsa Of Udara, Yakritpleehodar,Chidrodar, Baddhagudodar	CK	MK	K	L,L&PPT	T-CS,P-VIVA,VV-Viva,P-EXAM	F&S	II	-	LH
CO1, CO3, CO4	Discuss Aetiopathogenesis, Clinical, Features, Diagnosis, Complications, and Management of Ascites	CC	MK	K	DIS,PSM,LRI, D-BED, CBL	PRN,OSPE, QZ ,DEB, C-VC	F&S	II	H-KC	NLHT36.1
CO1, CO3, CO4, CO5	Discuss Aetiopathogenesis, Clinical, Features, Diagnosis of Peptic Ulcer Complications, and Management of Peritonitis	CC	MK	K	CBL,PT ,BL,X-Ray,PER	CL-PR,P-EXAM, C-VC,PRN,T-CS	F&S	II	H-KC	NLHT36.2

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 36.1	Examination of Ascites	1. **Interactive Case Studies**: Present case studies detailing patients with ascites, focusing on aetiopathogenesis, clinical features, diagnosis, complications, and management. Have students analyze and discuss these in small groups. 2. **Role-Playing**: Have students role-play as healthcare professionals and patients. The "doctors" can conduct mock patient interviews, perform physical exams, and discuss diagnostic tests and management plans for ascites.

		3. **Ultrasound Workshops**: Use videos or simulation tools to demonstrate how to perform an ultrasound for detecting ascites. Teach students to identify key features and assess the extent of fluid accumulation. 4. **Hands-On Simulations**: Use medical simulation tools or models to allow students to practice diagnostic and therapeutic procedures related to ascites, such as paracentesis. 5. **Group Discussions**: Facilitate group discussions on the challenges and complexities of managing ascites, encouraging students to ask questions and share insights.
NLHT 36.2	Examination of Peritonitis	1. **Detailed Case Studies**: Provide comprehensive patient case studies covering aetiopathogenesis, clinical features, diagnosis, complications, and management of peritonitis. Have students dissect and discuss these in small groups. 2. **Role-Playing Exercises**: Get students to role-play as healthcare professionals and patients. The "doctors" can conduct mock patient interviews and physical exams, diagnosing and discussing management strategies for peritonitis. 3. **Diagnostic Simulations**: Use simulation tools or apps to let students practice diagnostic procedures, such as performing a physical examination or ordering and interpreting imaging tests and lab results. 4. **Guest Lectures**: Bring in surgeons or gastroenterologists to discuss their clinical experiences and advancements in the diagnosis and management of peritonitis. 5. **Group Discussions**: Facilitate discussions on the challenges and strategies for managing peritonitis, encouraging students to share their insights and questions.
Non Lecture Hour Practical		

S.No	Name of Practical	Description of Practical Activity

Topic 37 Aamashaya Evam Adho-Aamashaya Vikara (Diseases of Stomach and Duodenum) (LH :2 NLHT: 1 NLHP: 2)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO1, CO2	Explain Etiopathogenesis, Classification, Clinical Features, Diagnosis, Complications and Management Peptic Ulcer	CK	MK	K	L&PPT ,L	QZ ,CL-PR ,VV-Viva,T -OBT,PP-Practical	F&S	II	-	LH
CO1, CO3, CO5	Describe Carcinoma of Stomach in detail	CK	MK	K	L,L&PPT	CBA,INT,PRN,Log book,PP-Practical	F&S	II	-	LH
CO1, CO3, CO6	Discuss the Aetiopathogenesis, Clinical Features, Diagnostic criteria, Management strategies (medical and surgical), and Complications of Pyloric Stenosis.	CC	MK	K	TUT,L &GD,IBL,FC,PBL	Log book,CBA,T-CS,QZ ,DEB	F&S	II	-	NLHT37.1
CO1, CO2, CO4	Demonstrate the skills to systematically assess, diagnose and manage abdominal lumps. Differentiate between various types of abdominal lumps based on clinical examination.	PSY-GUD	MK	K	TUT,L &GD,D, L&PPT ,SIM	PP-Practical,VV-Viva, SP,P-VIVA,T-CS	F&S	II	-	NLHP37.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 37.1	Examination of Pyloric Stenosis	**Steps-** Theory 1. Lecture: Aetiopathogenesis and classification. 2. Discussion: Clinical features and diagnostic criteria.

		3. Case studies: Diagnosis and management. 4. Group discussion: Complications and prevention. 5. Interactive session: Q&A. Practical 1. Clinical demonstration: Examination techniques. 2. Hands-on training: Diagnostic procedures (e.g., ultrasound). 3. Case presentation: Students present cases. Clinical 1. Live patient demonstration: Diagnosis and management. 2. Observational learning: Students observe expert consultations. 3. Interactive session: Q&A and discussion.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 37.1	Examination of Abdominal lump	**Steps:** **Patient History** 1. Gather History: Ask about the onset, duration, and progression of the lump. Enquire about associated symptoms like pain, changes in bowel habits, weight loss, or fever. 2. Medical History: Document past medical history, including any surgeries, gastrointestinal conditions, or family history of cancer. **Physical Examination** 1. Inspection: Observe the abdomen for visible lumps, asymmetry, or skin changes. 2. Palpation:

- Surface Palpation: Gently palpate the lump to determine its location, size, shape, and surface characteristics.
- Deep Palpation: Assess the consistency (soft, firm, hard), mobility, and tenderness of the lump.
- Assessing for Pulsation: Determine if the lump is pulsatile, which could indicate a vascular origin like an abdominal aortic aneurysm.

3. Percussion:
   - Dullness: Percuss over the lump to identify areas of dullness, which can indicate solid or cystic masses.
   - Resonance: Note any areas of resonance, which might suggest a gaseous component.
4. Auscultation:
   - Listen over the lump for bowel sounds or bruits, which can provide clues about its nature**.**

Supplementary Assessment

1. Imaging: Order appropriate imaging studies such as ultrasound, CT scan, or MRI to further evaluate the lump.
2. Laboratory Tests: Conduct relevant blood tests (e.g., complete blood count, tumor markers) to aid in diagnosis.

Topic 38 Kshudrantra Vikara (Diseases of Small Intestine) (LH :4 NLHT: 2 NLHP: 1)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO3, CO4, CO6	Describe the Aetiopathogenesis, Classification, Clinical Features, Diagnosis, Complications, and management of Tuberculosis of the Small Intestine	CK	MK	K	L&PPT ,L	PRN,PP-Practical,VV-Viva,CHK, T-CS	F&S	II	H-KC	LH
CO1, CO3,	Explain the Pathophysiology, Clinical features, Diagnostic criteria, and Management strategies of Blind loop syndrome,	CC	DK	K	TUT,CD,L&PP	P-VIVA,DOPS,VV-Vi	F&S	II	H-KC	NLHT38.1

CO4, CO7	Short Bowel Syndrome & Typhoid Enteritis				T ,D-BED,L&GD	va,DEB,PP-Practical				
CO1, CO3, CO4	Describe Aetiopathogenesis, Classification, Clinical Features, Examinations, Investigations & Diagnosis, Complications and Management of Intestinal Obstruction.	CC	MK	K	L,L&PPT	P-VIVA,DEB,PP-Practical,Log book,P-EXAM	F&S	II	-	LH
CO1, CO3, CO6	Explain the Pathophysiology, Clinical features, Diagnostic criteria, Management strategies, and Complications with Prevention methods of Intussusception.	CC	DK	K	L&GD, RP,FC, L_VC,CD	INT,DEB,T-CS,P-VIVA,PRN	F&S	II	-	NLHT38.2
CO1, CO3, CO6	Enumerate Etiopathogenesis, Classification, Clinical Features, investigations, Diagnosis, Complications and management of intestinal perforation	CK	MK	K	L&PPT ,L	CL-PR,P-EXAM,Log book,QZ ,T-CS	F&S	II	-	LH
CO1, CO3	Explain the Pathophysiology, Clinical features, Diagnostic criteria, Management strategies, and Complications with Prevention methods of Benign and Malignant neoplasms of the intestine.	CK	NK	K	L,L&PPT	P-EXAM,PP-Practical, INT,T-CS,PRN	F&S	II	-	LH
CO1, CO2, CO4	Demonstrate the skills to conduct a thorough abdominal examination with its Diagnosis and Management, identifying various abdominal pathologies.	PSY-GUD	MK	KH	DIS,PER,PT,CBL,SIM	T-CS,INT,P-EXAM,CBA	F&S	II	-	NLHP38.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 38.1	Demonstration of Blind loop syndrome, Short	**Activities -**

	Bowel Syndrome & Typhoid Enteritis	Blind Loop Syndrome- 1. Case study presentation: Students present a case of Blind Loop Syndrome. 2. Group discussion: Causes, symptoms, and complications. 3. Interactive lecture: Pathophysiology and diagnosis. 4. Clinical Description: Students analyze and discuss case scenarios. 5. Radiology session: Interpretation of imaging studies (e.g., CT scans). Short Bowel Syndrome 1. Lecture: Pathophysiology and classification. 2. Case study presentation: Students present a case of Short Bowel Syndrome. 3. Group discussion: Nutritional management and complications. 4. Problem-based learning: Students develop a treatment plan. 5. Guest lecture: Expert discussion on intestinal transplantation. Typhoid Enteritis 1. Interactive lecture: Pathophysiology and epidemiology. 2. Case study presentation: Students present a case of Typhoid Enteritis. 3. Group discussion: Complications and prevention. 4. Microbiology session: Laboratory diagnosis and antibiotic resistance. 5. Public health session: Vaccination and prevention strategies.
NLHT 38.2	Examination of Intussusception	Activities: Lecture and Discussion 1. Introduction to intussusception: definition, epidemiology, and pathophysiology. 2. Clinical features and diagnostic criteria: symptoms, signs, and imaging studies. 3. Management strategies: non-surgical (e.g., enema) and surgical. Case Studies and Group Discussion 1. Case study presentation: students present a case of intussusception. 2. Group discussion: diagnosis, management, and complications. 3. Problem-based learning: students develop a treatment plan. Practical and Clinical Sessions

		1. Clinical vignettes: students analyze and discuss case scenarios. 2. Radiology session: interpretation of imaging studies (e.g., ultrasound, CT scans). 3. Simulation-based training: students practice diagnosing and managing intussusception. Interactive and Online Sessions 1. Online lecture: expert discussion on intussusception management. 2. Interactive quiz: assessment of knowledge. 3. Virtual patient simulation: students practice diagnosing and managing intussusception.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 38.1	Per abdominal Clinical Examination.	**Steps:** Patient History 1. Gather History: Ask about symptoms such as pain, nausea, vomiting, bowel habits, and appetite changes. 2. Medical History: Document past medical history, including any gastrointestinal conditions, surgeries, or relevant family history. Physical Examination 1. Inspection: • Observe the abdomen for any visible abnormalities like scars, distension, or asymmetry. • Note any signs such as jaundice, spider angiomas, or visible peristalsis. 2. Palpation: • Perform light and deep palpation to assess for tenderness, masses, or organomegaly.

		• Check for rebound tenderness, guarding, and rigidity. • Evaluate liver size and tenderness (Murphy's sign), spleen, kidneys, and aorta. 3. Percussion: • Percuss all areas of the abdomen to assess for tympany or dullness. • Identify areas of abnormal resonance, indicating possible fluid, air, or mass presence. 4. Auscultation: • Use a stethoscope to listen to bowel sounds in all four quadrants. • Note any abnormal sounds like hyperactive, hypoactive, or absent bowel sounds. Supplementary Assessments 1. Laboratory Tests: Order relevant blood tests (e.g., liver function tests, amylase, lipase) based on clinical findings. 2. Imaging: If indicated, obtain imaging studies such as ultrasound or CT scan to further evaluate abdominal pathology.

Topic 39 Brihadantra Vikara (Diseases of Large Intestine) (LH :2 NLHT: 1 NLHP: 1)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO3, CO6	Enumerate Aetiopathogenesis, Classification, Clinical Features, Examinations, Investigations & Diagnosis, Complications, and Management of Crohn's Disease and Ulcerative Colitis	CK	DK	K	L&PPT ,L	DEB,PRN, P-VIVA,V V-Viva,PP-Practical	F&S	II	-	LH
CO1, CO2, CO3, CO4	Enumerate Aetiopathogenesis, Classification, Clinical Features, Examinations, Investigations & Diagnosis, Complications, and Management of Appendicitis (Undukapuchashotha).	CK	MK	K	L,L&PPT	CL-PR,INT,QZ ,P-PRF,PRN	F&S	II	-	LH

CO1, CO3	Explain the clinical presentation, diagnosis, staging, epidemiology, and risk factors of Carcinoma Colon with its management options (surgery, chemotherapy, radiation). Elaborate on the importance of screening and prevention.	CC	NK	K	PER,CBL,D,W,RLE	T-CS,CBA,PP-Practical,PRN,VV-Viva	F&S	II	-	NLHT39.1
CO1, CO2, CO4	Demonstrate the skills to assess, diagnose, and manage Chronic abdominal conditions. Differentiate between various Chronic abdominal pathologies through a systematic examination.	PSY-GUD	MK	K	RP,REC,CD,PT,TUT	PP-Practical,P-PRF,INT,P-VIVA,VV-Viva	F&S	II	-	NLHP39.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 39.1	Diagnosis of Carcinoma of Colon	**Activities:** Lecture and Discussion 1. Introduction to Carcinoma Colon: epidemiology, risk factors, and pathophysiology. 2. Clinical presentation and diagnosis: symptoms, signs, and diagnostic tests. 3. Management options: surgery, chemotherapy, radiation, and targeted therapy. Case Studies and Group Discussion 1. Case study presentation: students present a case of Carcinoma Colon. 2. Group discussion: diagnosis, management, and complications. 3. Problem-based learning: students develop a treatment plan. Practical and Clinical Sessions (7-9) 1. Clinical vignettes: students analyze and discuss case scenarios. 2. Endoscopy session: observation of colonoscopy procedure. 3. Radiology session: interpretation of imaging studies (e.g., CT scans). Interactive and Online Sessions 1. Online lecture: expert discussion on Carcinoma Colon management. 2. Interactive quiz: assessment of knowledge. 3. Virtual patient simulation: students practice diagnosing and managing Carcinoma Colon.

		Hands-on Activities 1. Colonoscopy simulation: students practice performing colonoscopy. 2. Surgical demonstration: observation of colectomy procedure. 3. Pathology session: examination of colon cancer specimens.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 39.1	Examination of Chronic Abdomen	**Steps:** Patient History 1. Gather History: Ask about the onset, duration, and nature of abdominal pain or discomfort. Inquire about associated symptoms such as weight loss, changes in bowel habits, nausea, and vomiting. 2. Medical History: Document past medical history, including any gastrointestinal conditions, surgeries, medications, and family history. Physical Examination 1. Inspection: • Observe the abdomen for visible abnormalities such as scars, distension, or skin changes. • Look for signs such as jaundice, spider angiomas, or masses. 2. Palpation: • Perform light and deep palpation to assess for tenderness, masses, or organomegaly. 3. Percussion: • Percuss all areas of the abdomen to assess for tympany or dullness. • Identify areas of abnormal resonance, indicating possible fluid, air, or mass presence.

		• Check for rebound tenderness, guarding, and rigidity. • Evaluate liver size and tenderness (Murphy's sign), spleen, kidneys, and aorta. 4. Auscultation: • Use a stethoscope to listen to bowel sounds in all four quadrants. • Note any abnormal sounds like hyperactive, hypoactive, or absent bowel sounds. Supplementary Assessments 1. Laboratory Tests: Order relevant blood tests (e.g., , Complete blood count, RBS, Liver function tests, Kidney function tests, S.amylase, S. lipase) based on clinical findings. 2. Imaging: If indicated, obtain imaging studies such as ultrasound, CT scan, or MRI to further evaluate abdominal pathology. 3. Endoscopy: Consider endoscopic examinations like upper GI endoscopy or colonoscopy if gastrointestinal tract involvement is suspected.

Topic 40 Guda Vikara (Diseases of Rectum and Anal Canal) (LH :5 NLHT: 4 NLHP: 4)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO3, CO5	Explain the surgical anatomy of the anus and rectum, the physiology of defecation and continence, anatomical landmarks, and relationships relevant to anorectal surgery. Discuss common anorectal conditions (e.g., hemorrhoids, fistulas, fissures) and skills in examining and diagnosing anorectal conditions.	CC	MK	K	L_VC,D-BED,L&GD,PER,CD	VV-Viva,PRN,T-CS,C-VC,P-VIVA	F&S	III	V-RS,V-RS	NLHT40.1
CO1, CO3	Describe Aetiopathogenesis, Classification, Clinical Features, Investigations, Diagnosis, Complications, and management of Prolapse of the rectum (Gudabramsha)	CK	NK	K	L&GD, L,L&PPT	T-OBT,VV-Viva,T-CS,Log book,PP-Practical	F&S	III	-	LH

CO1, CO4	Describe Aetiopathogenesis, Classification, Clinical Features, Examinations, Investigations & Diagnosis, Complications and Management of Anorectal Abscesses (Guda Vidradhi) and Bhagandara (Fistula-in-ano).	CK	MK	K	L&GD, L&PPT ,X-Ray, PSM,PT	PRN,VV-Viva,T-CS,INT,P-VIVA	F&S	III	-	NLHT40.2
CO1, CO2, CO3, CO7	Describe Aetiopathogenesis, Classification, Clinical Features, Investigations, Diagnosis, Complications, and management of Fistula in ano	CK	MK	K	L&PPT ,L	CBA,PRN, T-CS,PP-Practical,VV-Viva	F&S	III	-	LH
CO1, CO2, CO3, CO6, CO7	Describe Aetiopathogenesis, Classification, Clinical Features, Investigations, Diagnosis, Complications, and Management of Haemorrhoids.	CK	MK	K	L,L&PPT	P-CASE,PP-Practical,Log book,T-CS,VV-Viva	F&S	III	-	LH
CO1, CO2, CO3, CO4, CO6	Enumerate Nidan, Prakara, Samprapti, Laxana and Chikitsa of Arshas	CK	MK	K	L&PPT ,L	VV-Viva,PRN,DEB,T-CS,INT	F&S	III	-	LH
CO1, CO2, CO3, CO7	Describe Aetiopathogenesis, Classification, Clinical Features, Examinations, Investigations & Diagnosis, Complications and Management of Fissure-in-Ano.	CK	MK	K	L&PPT ,PER,L &GD,CD,D	T-CS,Log book,INT,P-EXAM,P-VIVA	F&S	III	-	NLHT40.3
CO1, CO3, CO6	Describe Etiopathogenesis, Classification, Clinical Features, Investigations, Diagnosis, Complications and management of Carcinoma of Rectum And Anal canal	CK	MK	K	L&GD, L,L&PPT	VV-Viva,P-EXAM,P-VIVA,PP-Practical,T-CS	F&S	III	-	LH
CO1, CO2,	Describe Aetiopathogenesis, Classification, Clinical Features, Examinations, Investigations & Diagnosis, Complications and	CK	NK	K	L&PPT ,SIM,T	PP-Practical,SP,P-VIV	F&S	III	-	NLHT40.4

CO4	Management of Pilonidal Sinus, Proctitis, Pruritis Ani & Injuries of Anorectal region				UT,CBL,L_VC	A,T-CS,VV-Viva				
CO1, CO2, CO4, CO5	Demonstrate the skills to identify, examine, diagnose, and manage sinus tracts and fistulas, and distinguish various types of sinuses, and fistulas.	PSY-GUD	MK	KH	PBL,L&PPT ,PER,CBL, DIS	DOPS,CHK,DOPS,T-CS,PP-Practical	F&S	III	-	NLHP40.1
CO1, CO2, CO3	Demonstrate the skills to conduct a thorough examination, Diagnosis, and management of rectal cases and distinguish various types of Rectal Pathologies	PSY-GUD	MK	K	FC,DIS, SIM,D-M,L&GD	T-CS,P-EXAM,SP,Mini-CEX,DOPS	F&S	III	-	NLHP40.2

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 40.1	Surgical Anatomy & physiology of Ano Rectal Conditions	**Activities:** Lecture and Discussion 1. Surgical anatomy of the anus and rectum. 2. Physiology of defecation and continence. 3. Anatomical relationships and landmarks. Dissection and Practical Sessions 1. Cadaveric dissection: students explore anorectal anatomy. 2. Prosection demonstration: detailed examination of anorectal structures. 3. Identification of anatomical landmarks and relationships. Case Studies and Group Discussion 1. Case study presentation: students present anorectal conditions. 2. Group discussion: diagnosis, management, and complications. 3. Problem-based learning: students develop treatment plans. Clinical and Endoscopy Sessions 1. Clinical examination: students practice examining patients. 2. Endoscopy demonstration: observation of anoscopy and sigmoidoscopy.

		3. Radiology session: interpretation of imaging studies (e.g., MRI, CT scans). Interactive and Online Sessions 1. Online lecture: expert discussion on anorectal surgery. 2. Interactive quiz: assessment of knowledge. 3. Virtual patient simulation: students practice diagnosing and managing anorectal conditions.
NLHT 40.2	Examination of Anorectal Abscesses (Guda Vidradhi) and Bhagandara (Fistula-in-ano)	**Activities:** Lecture and Discussion 1. Introduction to Anorectal Abscesses (Guda Vidradhi): definition, etiology, and pathophysiology. 2. Clinical presentation and diagnosis: symptoms, signs, and diagnostic tests. 3. Management options: medical, surgical, and Ayurvedic. Case Studies and Group Discussion 1. Case study presentation: students present Anorectal Abscesses or Bhagandara cases. 2. Group discussion: diagnosis, management, and complications. 3. Problem-based learning: students develop treatment plans. Practical and Clinical Sessions 1. Clinical examination: students practice examining patients with Anorectal Abscesses or Bhagandara. 2. Surgical demonstration: observation of abscess drainage or fistulotomy procedures. 3. Radiology session: interpretation of imaging studies (e.g., MRI, CT scans). Ayurvedic Perspective 1. Lecture: Ayurvedic perspective on Anorectal Abscesses (Guda Vidradhi) and Bhagandara. 2. Discussion: Ayurvedic management options (e.g., Kshar Sutra, herbal remedies). 3. Case study presentation: Ayurvedic management of Anorectal Abscesses or Bhagandara. Interactive and Online Sessions 1. Online lecture: expert discussion on Anorectal Abscesses and Bhagandara management. 2. Interactive quiz: assessment of knowledge. 3. Virtual patient simulation: students practice diagnosing and managing Anorectal Abscesses and Bhagandara.

NLHT 40.3	Examination of Fissure in Ano (Parikartika)	**Activities:** Lecture and Discussion 1. Etiopathogenesis and classification of Fissure-in-Ano. 2. Clinical features: symptoms, signs, and stages. 3. Investigations: diagnostic criteria and modalities (e.g., anoscopy, MRI). Case Studies and Group Discussion 1. Case study presentation: students present Fissure-in-Ano cases. 2. Group discussion: diagnosis, management, and complications. 3. Problem-based learning: students develop treatment plans. Practical and Clinical Sessions 1. Clinical examination: students practice examining patients with Fissure-in-Ano. 2. Proctoscopy demonstration: observation of fissure visualization. 3. Radiology session: interpretation of imaging studies (e.g., MRI, CT scans). Interactive and Online Sessions 1. Online lecture: expert discussion on Fissure-in-Ano management. 2. Interactive quiz: assessment of knowledge. 3. Virtual patient simulation: students practice diagnosing and managing Fissure-in-Ano.
NLHT 40.4	Examination of Pilonidal Sinus, Proctitis, Pruritis Ani & Injuries of Anorectal region	Pilonidal Sinus Activities: 1. Lecture: definition, etiology, and pathophysiology. 2. Case study presentation: students present Pilonidal Sinus cases. 3. Group discussion: diagnosis, management, and complications. 4. Surgical demonstration: observation of Pilonidal Sinus excision. Proctitis Activities: 1. Lecture: definition, etiology, and pathophysiology. 2. Case study presentation: students present Proctitis cases. 3. Group discussion: diagnosis, management, and complications.

		4. Proctoscopy demonstration: observation of Proctitis visualization. Pruritis Ani Activities: 1. Lecture: definition, etiology, and pathophysiology. 2. Case study presentation: students present Pruritis Ani cases. 3. Group discussion: diagnosis, management, and complications. 4. Dermatology session: examination of Pruritis Ani specimens. Injuries of Anorectal Region Activities: 1. Lecture: types and causes of anorectal injuries. 2. Case study presentation: students present anorectal injury cases. 3. Group discussion: diagnosis, management, and complications. 4. Surgical demonstration: observation of anorectal injury repair.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 40.1	Examination of a Sinus or Fistula and Hands-on training on Simulators	**Steps:** Patient History 1. Gather History: Ask about the onset, duration, and nature of symptoms. Inquire about discharge, pain, and any prior surgeries or infections. 2. Medical History: Document past medical history, including any relevant systemic conditions like Crohn's disease, tuberculosis, or diabetes. Physical Examination

		1. Inspection: • Examine the area for visible signs of a sinus or fistula, such as an external opening, discharge, or skin changes. • Note the location, size, and appearance of any external openings. 2. Palpation: • Gently palpate the surrounding tissue to assess for tenderness, induration, or signs of infection. • Determine the tract's direction by feeling induration along the pathway. 3. Probing: • Use a sterile malleable probe to gently explore the sinus or fistula tract. • Note the depth, direction, and any resistance or obstructions. 4. Imaging (if available): • Consider using MRI, or fistulography to visualize the tract and assess its extent and connections. Supplementary Assessments 1. Special Tests: Consider tests for underlying conditions that may contribute to sinus or fistula formation, such as inflammatory markers or tuberculosis tests. Hands-on Training with Simulators 1. Simulator Setup: Ensure the simulator accurately represents the anatomy and pathology of a sinus or fistula. 2. Practice Sessions: Allow participants to practice inspection, palpation, and probing techniques on the simulator. 3. Feedback and Debriefing: Provide constructive feedback and conduct a debriefing session to discuss findings and areas for improvement.
NLHP 40.2	Examination of Rectal case and Hands-on training	**Steps:**

	on Simulators	Patient History 1. Gather History: Ask about symptoms such as pain, bleeding, changes in bowel habits, and discharge. Inquire about duration, onset, and any associated symptoms like weight loss or systemic issues. 2. Medical History: Document past medical history, including any gastrointestinal conditions, surgeries, medications, and family history of colorectal diseases. Physical Examination 1. Inspection: • Observe the perianal area for visible abnormalities such as skin tags, fissures, hemorrhoids, or external masses. • Look for signs of inflammation, discharge, or bleeding. 2. Digital Rectal Examination (DRE): • Preparation: Explain the procedure to the patient, ensuring privacy and comfort. Use gloves and lubrication. • Technique: Gently insert a lubricated, gloved finger into the rectum. Assess for tenderness, masses, and the tone of the anal sphincter. Feel for any abnormalities within the rectal wall. • Note Findings: Document findings such as masses, tenderness, and stool characteristics (e.g., blood, mucus). Supplementary Assessments 1. Proctoscopy or Anoscopy: If available, use a proctoscope or anoscope to visualize the rectal mucosa and identify any lesions or abnormalities. 2. Laboratory Tests: Collect stool samples for occult blood testing and culture if indicated.

		3. Imaging: Consider ordering imaging studies such as an abdominal X-ray, CT scan, or MRI if further evaluation is needed. Hands-on Training with Simulators 1. Simulator Setup: Ensure the simulator accurately represents rectal anatomy and pathology. 2. Practice Sessions: Allow participants to practice the digital rectal examination and use of proctoscopy or anoscopy on the simulator. 3. Feedback and Debriefing: Provide constructive feedback and conduct a debriefing session to discuss findings and areas for improvement.

Topic 41 Udarabhighata (Abdominal Injuries) (LH :1 NLHT: 0 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO3, CO4, CO6	Explain abdominal injuries and their management	CK	NK	K	L&PPT ,L&GD, L	T-CS,DOPS,PP-Practical,DOPS, VV-Viva	F&S	III	-	LH
CO1, CO3, CO4, CO6	Demonstrate the skills to conduct a thorough examination, Diagnosis, and management of Abdominal injuries & Trauma patients and distinguish various types of Abdominal injuries.	PSY-MEC	NK	K	PT,FC,SIM,W,L &PPT	T-OBT,DOPS,T-CS,DOPS,CHK	F&S	III	-	NLHP41.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 41.1	Examination of Abdominal Injuries	**Steps:**

		Initial Assessment 1. Scene Safety: Ensure the environment is safe for both the patient and healthcare providers. 2. Primary Survey: Follow the ABCDE approach (Airway, Breathing, Circulation, Disability, Exposure) to assess and stabilize the patient. 3. Obtain Consent: Explain the procedure to the patient and obtain their consent, if they are conscious and able to provide it. Physical Examination 1. Inspection: Observe the abdomen for signs of injury such as bruising, swelling, open wounds, or deformities. 2. Palpation: Gently palpate the abdomen to identify areas of tenderness, distension, guarding, or rigidity. 3. Percussion: Tap on the abdomen to assess for dullness or tympany, which might indicate internal bleeding or air. 4. Auscultation: Listen to bowel sounds using a stethoscope to detect any abnormalities such as absent bowel sounds, which can suggest peritonitis or intestinal obstruction. Supplementary Assessments 1. Vital Signs Monitoring: Continuously monitor the patient's vital signs (heart rate, respiratory rate, blood pressure, oxygen saturation) to detect any deterioration. 2. Imaging: If available, order imaging studies such as abdominal X-ray, ultrasound, or CT scan to further evaluate the injuries. 3. Laboratory Tests: Order relevant blood tests (e.g., Complete blood count, electrolytes, liver function tests, S.amylase, S.lipase) based on clinical findings.
Topic 42 Yakrit Vikara (Diseases of Liver) (LH :3 NLHT: 1 NLHP: 10)		

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO4, CO5	Explain the Aetiology, Clinical features, Diagnosis, and Emergency Management of Liver injury.	CK	NK	K	L&GD, L&PPT ,L	QZ ,DEB,INT,P-VIVA,PP-Practical	F&S	III	-	LH
CO1, CO5	Explain the Aetiology, Clinical features, Diagnosis, and Management of Hydatid Cyst and Liver Abscess	CK	DK	K	L,L&PPT	T-CS,VV-Viva,INT,PP-Practical, P-CASE	F&S	III	-	LH
CO1, CO4, CO5	Explain the Aetiology, Clinical features, Diagnosis, and Management of Hepatomegaly and Carcinoma of the Liver	CK	NK	K	L,L&PPT	PP-Practical,DEB,INT, T-CS,VV-Viva	F&S	III	-	LH
CO1, CO2, CO4	Demonstrate the skills to learn the Surgical Anatomy of the Liver and conduct a thorough examination, Diagnosis, and Management of Acute Liver Injuries.	CK	MK	K	TUT,L_VC,L&PPT ,CBL,L&GD	P-EXAM,QZ ,VV-Viva,PP-Practical, COM	F&S	III	-	NLHP42.1
CO1, CO2, CO4	Demonstrate the skills to diagnose and manage surgical jaundice and explain the use of Endoscopic Retrograde Cholangiopancreatography (ERCP) in the evaluation and treatment of Biliary Obstructions.	CC	NK	K	L&PPT ,CBL,CD,L&GD,D	QZ ,VV-Viva,P-EXAM,CBA,PP-Practical	F&S	III	-	NLHP42.2
CO1, CO3, CO6	Explain the pathophysiology, Risk factors, clinical features, diagnostic criteria, management strategies, and treatment options of Acute Liver Injury (ALI).	CC	DK	K	L&GD, FC,TBL ,BL,D-M	CBA,PP-Practical,P-EXAM,DEB, PUZ	F&S	III	-	NLHT42.1
CO1,	Demonstrate the skills to examine and diagnose Hepatomegaly an	CAP	MK	K	PER,D-	QZ ,OSCE,	F&S	III	-	NLHP42.3

CO2, CO4	d the procedure for Percutaneous Aspiration, Injection, and Respir ation (PAIR) in treating liver abscesses.				BED,L &GD,C D,FC	CL-PR,SB A,PRN				
CO1, CO2, CO4, CO6	Demonstrate the skills to perform Paracentesis safely and effectively in the management of Ascites and the steps involved in the procedure using patients or simulator s.	PSY-GUD	NK	K	SDL,D-M,DIS, TUT,L_ VC	P-CASE,V V-Viva, C-VC,P-ID,P P-Practical	F&S	III	-	NLHP42.4
CO1, CO2, CO4	Discuss surgical management options for Portal Hypertension and the steps involved in various surgical procedures.	CC	NK	K	CBL,C D,SDL, PT,D	P-REC,P-C ASE,INT,P RN,P-EXAM	F&S	III	-	NLHP42.5

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 42.1	Examination of the case of Acute Liver Injury	**Activities:** Lecture and Discussion 1. Introduction to ALI: definition, epidemiology, and pathophysiology. 2. Causes and risk factors: toxins, medications, viruses, and metabolic disorders. 3. Clinical features and diagnostic criteria: symptoms, signs, and laboratory tests. Case Study Presentation 1. Students present ALI case studies. 2. Group discussion: diagnosis, management, and complications. 3. Problem-based learning: students develop treatment plans. Practical and Clinical Sessions 1. Clinical examination: students practice examining patients with ALI. 2. Laboratory session: interpretation of liver function tests (LFTs) and other diagnostic tests. 3. Imaging session: interpretation of ultrasound, CT, or MRI scans. Interactive and Online Sessions

		1. Online lecture: expert discussion on ALI management. 2. Interactive quiz: assessment of knowledge. 3. Virtual patient simulation: students practice diagnosing and managing ALI. Hands-on Activities 1. Simulation-based training: students practice managing ALI scenarios. 2. Pathology session: examination of liver biopsy specimens. 3. Patient education: students develop patient education materials. Small Group Discussions 1. Discussion of ALI-related topics: - Toxin-induced liver injury - Viral hepatitis - Autoimmune hepatitis - Liver transplantation 2. Case-based discussions: students analyze ALI cases. 3. Journal club: discussion of recent research articles.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 42.1	Demonstration of Surgical anatomy of the liver, Acute Liver Injury in patients, or simulator.	**Steps:** Surgical Anatomy of the Liver 1. Anatomical Overview: • Liver Lobes: Right lobe, left lobe, caudate lobe, and quadrate lobe. • Surfaces: Diaphragmatic surface (superior) and visceral surface (inferior). • Ligaments: Falciform ligament, coronary ligaments, and triangular ligaments. • Blood Supply: Hepatic artery, portal vein, and hepatic veins. • Biliary System: Bile ducts, gallbladder, and cystic duct.

		Examination and Management of Acute Liver Injury 1. Initial Assessment: • History Taking: Gather information on the mechanism of injury, symptoms like pain and jaundice, and any pre-existing liver conditions. • Physical Examination: Inspect for signs of trauma, palpate for tenderness and hepatomegaly, and assess for peritoneal signs. 2. Diagnostic Tests: • Laboratory Tests: Liver function tests, Complete blood count, coagulation profile, and Serum amylase/ S.lipase. • Imaging Studies: Ultrasound, CT scan, or MRI to evaluate the extent of injury. 3. Management Techniques: • NonOperative Management: Indications for conservative management, monitoring protocols, and follow-up imaging. • Surgical Intervention: Indications for surgery, types of surgical procedures (e.g., repair, resection), and post-operative care.
NLHP 42.2	Demonstration of Diagnosis & Management of Surgical Jaundice with ERCP on patients /simulator.	**Steps:** Patient History 1. Gather History: Ask about the onset, duration, and nature of jaundice. Inquire about associated symptoms such as pruritus, dark urine, pale stools, and abdominal pain. 2. Medical History: Document past medical history, including any liver diseases, gallstones, pancreatitis, or previous surgeries. Physical Examination 1. Inspection: Observe the skin and sclera for jaundice. Look for signs of liver disease such as spider angiomas, palmar erythema, and ascites.

		2. Palpation: Check for hepatomegaly and tenderness in the right upper quadrant. 3. Auscultation: Listen for bowel sounds and any abnormal vascular sounds. Diagnostic Tests 1. Laboratory Tests: Order liver function tests, complete blood count, and coagulation profile. 2. Imaging Studies: Perform ultrasound, CT scan, or MRI, or ERCP to evaluate the biliary tree and liver.
NLHP 42.3	Examination of Hepatomegaly & PAIR in Liver Abscess and Hands-on Practice.	**Steps:** 1. Patient History: • Gather history of symptoms such as abdominal pain, fatigue, jaundice, and weight loss. • Inquire about past medical history, including liver disease, infections, and alcohol consumption. 2. Physical Examination: • Inspection: Observe the abdomen for distension and any visible masses. • Palpation: ◦ Position the patient supine with knees slightly bent. ◦ Start palpation from the right iliac fossa moving towards the right costal margin. ◦ Note the size, surface, consistency, and tenderness of the liver. • Percussion: Percuss the liver borders to determine its span and confirm hepatomegaly. PAIR in Liver Abscess 1. Preparation: • Explain the procedure to the patient and obtain informed consent.

		• Ensure aseptic technique and gather necessary equipment (e.g., needles, syringes, antiseptic solution). 2. Procedure: • Ultrasound Guidance: Use ultrasound to locate the abscess. • Aspiration: ◦ Insert the needle into the abscess cavity under ultrasound guidance. ◦ Aspirate the abscess content and send it for microbiological analysis. • Injection: Inject a scolicidal agent (e.g., hypertonic saline) into the abscess cavity. • Re-aspiration: Re-aspirate the contents to remove the injected agent and debris. 3. Post-Procedure Care: • Monitor the patient for any complications such as bleeding or infection. • Follow up with repeat ultrasound to assess the resolution of the abscess.
NLHP 42.4	Demonstration of Paracentesis inpatient or simulator.	**Steps:** Patient History and Assessment 1. Gather History: Ask about symptoms such as abdominal distension, pain, and shortness of breath. Enquire about past medical history including liver disease, heart failure, and cancer. 2. Physical Examination: Assess for signs of ascites, including abdominal distension, fluid wave, and shifting dullness. Procedure Preparation 1. Consent: Explain the procedure to the patient and obtain informed consent. 2. Preparation: Ensure aseptic technique, and gather necessary equipment (e.g., sterile gloves, antiseptic solution, needles, syringes, collection bottles). 3. Positioning: Position the patient comfortably, usually in a semi-upright position to allow fluid to accumulate in the lower abdomen. Performing Paracentesis

		1. Site Selection: • Identify the site of fluid accumulation, typically in the lower quadrant. • Use ultrasound guidance if available to minimize the risk of complications. 2. Sterilization: Clean the selected site with an antiseptic solution and drape the area with sterile drapes. 3. Local Anesthesia: Administer local anesthesia to numb the area. 4. Needle Insertion: • Insert the needle perpendicular to the skin and advance it slowly while aspirating until fluid is obtained. • Attach a syringe to collect the fluid for diagnostic analysis or therapeutic removal. 5. Fluid Collection: Collect fluid in sterile containers for laboratory analysis (e.g., cell count, protein, culture). 6. Post-Procedure Care: • Remove the needle and apply a sterile dressing to the site. • Monitor the patient for any complications such as bleeding or infection. • Send collected fluid for laboratory analysis.
NLHP 42.5	Surgical management of Portal Hypertension	**Steps:** Educational Content: Prepare detailed scripts and visual aids to explain the surgical steps, indications, and post-operative care. A thorough understanding of the surgical management of portal hypertension is essential for effective treatment. Videographic demonstrations and hands-on practice with simulators enhance proficiency and confidence in performing these complex procedures. Regular practice and staying updated with the latest surgical techniques are crucial for successful outcomes in patients with portal hypertensio**n**

Topic 43 Pittashaya Vikara (Diseases of Gall Bladder) (LH :2 NLHT: 1 NLHP: 8)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1,	Discuss the gross & microscopic anatomy and histology of the	CC	MK	K	L_VC,S	P-ID,360D,	F&S	III	V-RS,V-	NLHT43.1

CO4, CO5	Gall Bladder with its anatomical relationships and landmarks, and congenital anomalies, diagnostic criteria, surgical procedures, complications, and post-operative care in Gall Bladder Diseases. Explain the role of laboratory tests, Liver function tests (LFTs), other relevant investigations with their Interpretation, and imaging studies in gallbladder disease.				IM,CBL ,DIS,L &GD	PP-Practica l,T-CS,INT			RS	
CO1, CO4, CO5	Explain Aetiopathogenesis, Classification, Clinical Features, Investigations, Diagnosis, Complications, and management of Choledochal Cyst & Congenital Biliary Atresia	CC	DK	K	L,L&PP T	P-VIVA,V V-Viva,PP-Practical,T-CS,PRN	F&S	III	-	LH
CO1, CO2, CO3, CO6	Describe Aetiopathogenesis, Classification, Clinical Features, Investigations, Diagnosis, Complications, and management of Cholecystitis (Pittashaya Shotha) and Choledocholithiasis	CC	MK	K	L&PPT ,L	Log book,P -PRF,PRN, OSCE,T-CS	F&S	III	-	LH
CO1, CO2, CO4, CO6	Demonstrate skills in taking patient history and performing physic al examinations, diagnosis, treatment and communication skills for cholecystitis and Choledocho lithiasis	CK	DK	K	CD,PER ,PT,D,R P	T-OBT,OS CE,T-CS,O SPE,VV-Viva	F&S	III	-	NLHP43.1
CO1, CO2, CO4	Explain the concept and the diagnostic and therapeutic techniques of Magnetic Resonance Cholangiopancreatography (MRCP) and Endoscopic Retrograde Cholangiopancreatography (ERCP) in Biliary and Pancreatic Disorders	CK	NK	K	L&PPT ,FC,L& GD,BL, PT	DOAP,OSP E,P-VIVA, T-OBT,PP-Practical	F&S	III	-	NLHP43.2
CO1, CO2, CO4	Demonstrate skills in taking patient history, diagnostic and comm unication skills, and performing physical examinations for cholecystitis.	PSY-SET	DK	K	PER,L& GD,L& PPT ,C D,L_VC	P-VIVA,P-CASE,SP,T-OBT,P-MOD	F&S	III	-	NLHP43.3
CO1, CO2,	Demonstrate skills in clinical presentation, diagnostic techniques, etc. through various interactive methods for Gall Bladder cancer	PSY-GUD	DK	K	D,PT,IB L,CD,L	P-VIVA,P-EXAM,OS	F&S	III	-	NLHP43.4

CO4	fostering effective communication and teamwork skills in a clinical setting.				&PPT	CE,CBA,P-REC					

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 43.1	Surgical anatomy of Gall Bladder, congenital anomalies of Gall Bladder & Basic Investigations	**Surgical anatomy of Gall Bladder** Activities: 1. Lecture: gross anatomy and microscopic anatomy. 2. Dissection demonstration: gallbladder dissection. 3. Histology lab: examination of gallbladder tissue. 4. Case study presentation: students present gallbladder surgery cases. 5. Interactive session: 3D visualization of gallbladder anatomy. **Congenital Anomalies of the Gallbladder** Activities: 1. Lecture: classification and types of congenital anomalies. 2. Case study presentation: students present congenital anomaly cases. 3. Radiology session: interpretation of imaging studies (e.g., ultrasound, CT). 4. Surgical demonstration: observation of surgical correction. 5. Group discussion: management and post-operative care. **Basic Investigations** Activities: 1. Lecture: laboratory tests and LFTs. 2. Case study presentation: students interpret investigation results. 3. Radiology session: interpretation of imaging studies. 4. Group discussion: diagnostic criteria and investigation protocols. 5. Practical session: students practice ordering and interpreting investigations

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 43.1	Cholecystitis and Choledocholithiasis Examination	**Steps:** Group Discussion 1. Topic Introduction: Start with a brief overview of cholecystitis, its causes, and clinical presentation. 2. Case Presentation: Present a typical case scenario of a patient with cholecystitis. Include details such as patient demographics, symptoms, and medical history. 3. Discussion Questions: • What are the common symptoms of cholecystitis? • What differential diagnoses should be considered? • What are the key elements in the patient's history that suggest cholecystitis? 4. Interactive Discussion: Encourage participants to share their thoughts and experiences. Facilitate a guided discussion to explore various aspects of diagnosis and management. Role Play 1. Scenario Setup: Create role play scenarios where participants take turns playing the roles of the patient, doctor, and observer. 2. Patient Role: The "patient" presents with symptoms suggestive of cholecystitis (e.g., right upper quadrant pain, nausea, fever). 3. Doctor Role: The "doctor" conducts a thorough history taking and physical examination, focusing on signs and symptoms of cholecystitis. 4. Observer Role: The "observer" provides feedback on the interaction, focusing on communication skills, examination techniques, and clinical reasoning. 5. Debriefing: Conduct a debriefing session to discuss the role play experience, highlighting strengths and areas for improvement.

		Case Taking and Examination 1. Patient History: • Gather a detailed history of the present illness, including the onset, duration, and nature of pain. • Ask about associated symptoms such as nausea, vomiting, fever, and changes in bowel habits. • Document past medical history, including any previous episodes of similar pain, surgeries, and family history of gallbladder disease. 2. Physical Examination: • Inspection: Observe the abdomen for any visible signs such as distension or jaundice. • Palpation: Perform gentle and then deeper palpation of the abdomen, focusing on the right upper quadrant. Check for Murphy's sign (pain upon palpation of the gallbladder). • Percussion: Percuss the abdomen to identify areas of tenderness or fullness. • Auscultation: Listen for bowel sounds and any abnormalities.
NLHP 43.2	MRCP & ERCP Demonstration	**Steps:** MRCP (Magnetic Resonance Cholangiopancreatography) 1. Patient Preparation: • History and Consent: Explain the procedure to the patient, obtain informed consent, and document relevant medical history. • Fasting: Ensure the patient fasts for 4-6 hours before the procedure. • Positioning: Position the patient supine on the MRI table. 2. Procedure – By Radiologist ERCP (Endoscopic Retrograde Cholangiopancreatography)

		1. Patient Preparation: • History and Consent: Explain the procedure to the patient, obtain informed consent, and document relevant medical history. • Fasting: Ensure the patient fasts for 6-8 hours before the procedure. • Sedation: Administer appropriate sedation and monitor the patient's vital signs. 2. Procedure – By Expert Videographic Demonstration Educational Content: Prepare scripts and visual aids to explain the indications, steps, and potential complications of MRCP and ERCP. Hands-on Training with Simulators 1. Simulator Setup: Ensure the simulator accurately represents the anatomy and pathology of the biliary and pancreatic systems. 2. Practice Sessions: Allow participants to practice MRCP and ERCP techniques on the simulator. 3. Feedback and Debriefing: Provide constructive feedback and conduct a debriefing session to discuss findings and areas for improvement.
NLHP 43.3	Case taking and examination of cholecystitis on the patients.	**Steps:** Group Discussion 1. Topic Introduction: Start with a brief overview of cholecystitis, its causes, and clinical presentation. 2. Case Presentation: Present a typical case scenario of a patient with cholecystitis. Include details such as patient demographics, symptoms, and medical history. 3. Discussion Questions: • What are the common symptoms of cholecystitis? • What differential diagnoses should be considered? • What are the key elements in the patient's history that suggest cholecystitis?

4. Interactive Discussion: Encourage participants to share their thoughts and experiences. Facilitate a guided discussion to explore various aspects of diagnosis and management.

Role Play

1. Scenario Setup: Create role play scenarios where participants take turns playing the roles of the patient, doctor, and observer.
2. Patient Role: The "patient" presents with symptoms suggestive of cholecystitis (e.g., right upper quadrant pain, nausea, fever).
3. Doctor Role: The "doctor" conducts a thorough history taking and physical examination, focusing on signs and symptoms of cholecystitis.
4. Observer Role: The "observer" provides feedback on the interaction, focusing on communication skills, examination techniques, and clinical reasoning.
5. Debriefing: Conduct a debriefing session to discuss the role play experience, highlighting strengths and areas for improvement.

Case Taking and Examination

1. Patient History:
    - Gather a detailed history of the present illness, including the onset, duration, and nature of pain.
    - Ask about associated symptoms such as nausea, vomiting, fever, and changes in bowel habits.
    - Document past medical history, including any previous episodes of similar pain, surgeries, and family history of gallbladder disease.
2. Physical Examination:
    - Inspection: Observe the abdomen for any visible signs such as distension or jaundice.
    - Palpation: Perform gentle and then deeper palpation of the abdomen, focusing on the right upper quadrant. Check for Murphy's sign (pain upon palpation of the

		gallbladder). • Percussion: Percuss the abdomen to identify areas of tenderness or fullness. • Auscultation: Listen for bowel sounds and any abnormalities.
NLHP 43.4	Case presentation of Carcinoma of Gall Bladder	**Steps:** Group Discussion 1. Topic Introduction: Start with an overview of gallbladder cancer, its epidemiology, risk factors, and clinical presentation. 2. Case Scenario: Present a typical case of a patient with suspected gallbladder cancer, including history, symptoms, and initial findings. 3. Discussion Questions: • What are the common symptoms and risk factors for gallbladder cancer? • What diagnostic tests are essential for confirming the diagnosis? • What are the treatment options and their indications? 4. Interactive Discussion: Encourage participants to share their experiences, insights, and questions. Facilitate a guided discussion on the diagnosis and management of gallbladder cancer. Case Presentation 1. Case Preparation: Select a real or simulated case of gallbladder cancer with comprehensive details. 2. Presentation Components: Include patient history, clinical findings, diagnostic workup, treatment plan, and follow-up. 3. Analysis and Discussion: After presenting the case, engage the participants in analyzing the case, discussing differential diagnoses, and evaluating the management plan. Video Demonstration

		1. Video Commentary: Provide a detailed commentary on each video, explaining the procedure, its indications, and potential complications. 2. Interactive Viewing: Encourage participants to ask questions and discuss the videos in real time. Role Play 1. Scenario Setup: Create role-play scenarios where participants take turns playing the roles of the patient, doctor, and family member. 2. Patient Role: The "patient" presents with symptoms suggestive of gallbladder cancer. 3. Doctor Role: The "doctor" conducts a thorough history-taking and physical examination, explains the diagnosis and treatment options, and addresses the patient's and family's concerns. 4. Observer Role: The "observer" provides feedback on the interaction, focusing on communication skills, empathy, and clinical reasoning. 5. Debriefing: Conduct a debriefing session to discuss the role-play experience, highlighting strengths and areas for improvement.

Topic 44 Agnyashaya Vikara (Diseases of Pancreas) (LH :3 NLHT: 1 NLHP: 6)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO4	Explain the classification and types of congenital anomalies of the Pancreas with their clinical presentation, diagnosis, management options and surgical interventions, complications, and Post-operative care	CC	MK	K	TUT,CD,PT,L&PPT,CBL	PRN,PP-Practical,P-PRF,P-CASE,T-CS	F&S	III	V-RS,V-KS,V-RS	NLHT44.1
CO1, CO5, CO6	Enumerate Aetiopathogenesis, Classification, Clinical Features, Investigations, Diagnosis & Management of Acute Pancreatitis, Chronic & Chronic relapsing pancreatitis & its Management.	CK	MK	K	L,L&PPT	Log book,CL-PR, C-VC,T-CS,P-VIVA	F&S	III	-	LH
CO1,	Describe Cysts of Pancreas & Pseudocyst of Pancreas & its	CC	NK	K	L,L_VC	T-CS,P-EX	F&S	III	-	LH

CO2, CO4	Management.				,L&PPT	AM,PP-Practical,P-VIVA,PRN				
CO1, CO3, CO5	Explain Cancer of the Pancreas & its Management, Insulinoma & Zollinger Ellison Syndrome.	CC	NK	K	L_VC,L ,L&PPT	VV-Viva,P-EXAM,PP-Practical,T-CS,P-VIVA	F&S	III	-	LH
CO1, CO2, CO4	Demonstrate skills in diagnosing and managing Pancreatitis, along with the clinical presentation, diagnostic techniques, and tre atment options.	PSY-GUD	DK	K	L&PPT ,PBL,PER,L,RP	PM,INT,VV-Viva,OSCE,PP-Practical	F&S	III	-	NLHP44.1
CO1, CO2, CO4	Demonstrate skills to identify, diagnose, and manage Pseudo-Pancreatic Cysts.	PSY-GUD	NK	K	DIS,PBL,L&PPT ,D,PT	P-VIVA,P-EXAM,INT ,PRN,DEB	F&S	III	-	NLHP44.2
CO1, CO2, CO4, CO5	Demonstrate skills in diagnosing and managing Pancreatic Neoplasms with its surgical techniques and treatment options.	CK	NK	K	D-BED, L&GD, PT,L&PPT ,TBL	T-CS,P-EXAM,PP-Practical,VV-Viva	F&S	III	-	NLHP44.3

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 44.1	Surgical Anatomy & physiology, Congenital Anomalies of Pancreas	**Activities:** 1. Lecture: gross anatomy and microscopic anatomy. 2. Dissection demonstration: pancreatic dissection. 3. Histology lab: examination of pancreatic tissue. 4. Case study presentation: students present pancreatic surgery cases. 5. Interactive session: 3D visualization of pancreatic anatomy.

		6. Lecture: classification and types of congenital anomalies. 7. Case study presentation: students present congenital anomaly cases. 8. Radiology session: interpretation of imaging studies (e.g., CT, MRI). 9. Surgical demonstration: observation of surgical correction. 10. Group discussion: management and post-operative care.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 44.1	Case taking of Pancreatitis with effective communication skills	**Steps:** Group Discussion 1. Topic Introduction: Start with an overview of pancreatitis, its types (acute and chronic), causes, and clinical presentation. 2. Case Scenario: Present a typical case of a patient with pancreatitis, including history, symptoms, and initial findings. 3. Discussion Questions: • What are the common symptoms and risk factors for pancreatitis? • What diagnostic tests are essential for confirming the diagnosis? • What are the treatment options and their indications? 4. Interactive Discussion: Encourage participants to share their experiences, insights, and questions. Facilitate a guided discussion on the diagnosis and management of pancreatitis. Case Presentation 1. Case Preparation: Select a real or simulated case of pancreatitis with comprehensive details. 2. Presentation Components: Include patient history, clinical findings, diagnostic workup,

		treatment plan, and follow-up. 3. Analysis and Discussion: After presenting the case, engage the participants in analyzing the case, discussing differential diagnoses, and evaluating the management plan. Video Demonstration 1. Video Commentary: Provide a detailed commentary on each video, explaining the procedure, its indications, and potential complications. 2. Interactive Viewing: Encourage participants to ask questions and discuss the videos in real time. Role Play 1. Scenario Setup: Create role-play scenarios where participants take turns playing the roles of the patient, doctor, and family member. 2. Debriefing: Conduct a debriefing session to discuss the role-play experience, highlighting strengths and areas for improvement.
NLHP 44.2	Demonstration of Pseudo Pancreatic cyst on patient or simulator.	**Steps:** Patient History and Assessment 1. Gather History: Ask about symptoms such as abdominal pain, nausea, vomiting, and a history of pancreatitis. Document the duration and progression of symptoms. 2. Physical Examination: Observe for signs of abdominal distension, tenderness, and palpable masses. Perform a thorough examination to assess for complications. Diagnostic Tests

		1. Imaging Studies: Perform ultrasound, CT scan, or MRI to visualize the pseudo-pancreatic cyst and assess its size, location, and relation to surrounding structures. 2. Laboratory Tests: Order relevant tests such as Serum Amylase, S.lipase, and liver function tests to assess the underlying condition. Video Demonstration Educational Content: Provide a detailed commentary on each video, explaining the indications, steps, and potential complications. Role Play 1. Scenario Setup: Create role-play scenarios where participants take turns playing the roles of the patient, doctor, and family member. 2. Debriefing: Conduct a debriefing session to discuss the role-play experience, highlighting strengths and areas for improvement.
NLHP 44.3	Case presentation of Neoplasm of Pancreas and its management.	**Steps:** Group Discussion 1. Topic Introduction: Begin with an overview of pancreatic neoplasms, including types (e.g., adenocarcinoma, neuroendocrine tumors), risk factors, and clinical presentation. 2. Case Scenario: Present a typical case of a patient with a pancreatic neoplasm, including history, symptoms, and initial findings. 3. Discussion Questions: • What are the common symptoms and risk factors for pancreatic neoplasms? • What diagnostic tests are essential for confirming the diagnosis? • What are the treatment options and their indications? 4. Interactive Discussion: Encourage participants to share their experiences, insights, and questions. Facilitate a guided discussion on the diagnosis and management of pancreatic neoplasms.

		Case Presentation 1. Case Preparation: Select a real or simulated case of a pancreatic neoplasm with comprehensive details. 2. Presentation Components: Include patient history, clinical findings, diagnostic workup, treatment plan, and follow-up. 3. Analysis and Discussion: After presenting the case, engage the participants in analyzing the case, discussing differential diagnoses, and evaluating the management plan. Video Demonstration 1. Video Commentary: Provide a detailed commentary on each video, explaining the procedure, its indications, and potential complications. 2. Interactive Viewing: Encourage participants to ask questions and discuss the videos in real time. Role Play 1. Scenario Setup: Create role- play scenarios where participants take turns playing the roles of the patient, doctor, and family member. 2. Debriefing: Conduct a debriefing session to discuss the role-play experience, highlighting strengths and areas for improvement.

Topic 45 Pleeha Vikara (Diseases of Spleen) (LH :3 NLHT: 0 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO2,	Define Aetiopathogenesis, Classification, Investigations, Clinical Features and Management of Spleen Rupture.	CK	NK	K	L,L&PPT	DEB,PP-Practical,P-	F&S	III	-	LH

CO3, CO6						VIVA, C-VC,T-CS				
CO1, CO2, CO6	Enumerate the Indications, Complications of Hypersplenism & Benefits of Spleenectomy.	CK	NK	K	L&PPT ,L	P-VIVA,P-EXAM,PP-Practical,PRN,Log book	F&S	III	-	LH
CO1, CO2, CO5	Describe Congenital Anomalies, Clinical Features, and Management of Splenomegaly (Pleeha Vridhi).	CK	DK	K	L&PPT ,L	VV-Viva,P-EXAM,PP-Practical,INT,Log book	F&S	III	-	LH
CO1, CO2, CO4, CO6	Discuss the clinical presentation, and implications of Splenic rupture and Splenomegaly, with their diagnostic approach, and Management strategies.	CC	NK	K	PT,PER ,DIS,L &GD,CD	C-VC,QZ , P-EXAM,VV-Viva,PRN	F&S	III	-	NLHP45.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 45.1	Case presentation of the Splenic Rupture & Splenomegaly on the patients or simulator.	**Steps** Class Discussion/Case Presentation Introduction: Briefly introduce splenic rupture and splenomegaly. State the objectives of the discussion/presentation.

		Case Descriptions: Splenic Rupture: Present a case of a patient with acute abdominal pain, history of trauma, and signs of shock. Splenomegaly: Describe a patient with gradual onset of abdominal discomfort, early satiety, and a palpable mass in the left upper quadrant. Diagnostic Approach: Discuss the diagnostic steps for each condition, including history, physical examination, lab tests, and imaging studies. Highlight the differences in diagnostic approaches for splenic rupture and splenomegaly. Management Strategies: Splenic Rupture: Emphasize the importance of immediate stabilization, fluid resuscitation, and possible surgical intervention (e.g., splenectomy). Splenomegaly: Focus on identifying and treating the underlying cause (e.g., infection, hematologic disorder) and managing symptoms. Q&A Session: Encourage questions and discussions from the audience. Clarify any doubts and provide additional insights. Video Demonstration/Role Play Preparation: Prepare scripts or scenarios for each condition. Assign roles to participants (e.g., patient, doctor, nurse). Demonstration: Splenic Rupture: Show an emergency room scenario with diagnosis and initial treatment of a patient with acute abdominal pain and shock. Splenomegaly: Demonstrate a patient consultation, discussing symptoms, examination findings, and management plans with the doctor. Debriefing: Discuss the key points from each demonstration. Highlight the learning objectives and take-home messages.

Topic 46 Vrikka Evam Mutravahini Vikara (Diseases of Kidney and Ureters) (LH :5 NLHT: 4 NLHP: 2)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO1, CO2	Describe the Surgical Anatomy and physiology of the Urogenital System and enumerate Aetiopathogenesis, Classification, Clinical Features, Diagnosis, Complications, and Management of Congenital anomalies of Kidney & Ureter, Horse Shoe kidney & Polycystic kidney.	CK	DK	K	SIM,D-M	P-VIVA,SP,P-MOD	F&S	III	V-RS,V-RS	NLHT46.1
CO1, CO3, CO5	Illustrate the Aetiopathogenesis, Causes, Characteristics, Clinical signs and symptoms, and Development of Congenital Kidney and Ureter anomalies and Polycystic Kidney Disease with their management and Complications.	CAN	MK	K	BL,CBL,TUT,DIS,SDL	M-CHT,VV-Viva,T-CS, C-VC,CL-PR	F&S	III	-	NLHT46.2
CO1, CO3, CO5	Elaborate on the Causes and Mechanisms of Kidney and Ureter injuries with their Clinical Features, Diagnostic Techniques, Management Plans, and Complications.	CC	MK	K	PER,TUT,D,PSM,RP	CL-PR,P-VIVA,P-PS,SP, C-VC	F&S	III	-	NLHT46.3
CO1, CO3, CO5	Define the Aetiopathogenesis, Classification, Clinical Features & Management of Hydronephrosis.	CK	MK	K	PL,LRI,L,L&PPT	P-VIVA,PRN,CL-PR,P-EXAM,QZ	F&S	III	-	LH
CO1, CO3, CO5	Define the Aetiopathogenesis, Classification, Clinical Features & Management of Non-Specific Infection of the Kidneys- Acute & Chronic Pyelonephritis.	CK	MK	K	L,L&GD,L_VC,L&PPT	PRN,DEB,VV-Viva, C-VC,M-CHT	F&S	III	-	LH
CO1, CO3, CO5	Describe the Perinephric Abscess & Renal Abscess.	CC	MK	K	L_VC,L&PPT ,L,L&GD,CD	PRN,VV-Viva,P-VIVA,T-CS,PP-Practical	F&S	III	-	LH

CO1, CO3, CO5	Define Aetiopathogenesis, Types, Clinical Features, Investigations, Complications & Management of Vrikkashmari (Renal Calculus).	CK	MK	K	L&PPT,L,L_VC,L&GD	P-VIVA,SA,PRN,PP-Practical,VV-Viva	F&S	III	-	LH
CO1, CO3, CO5	Elaborate Pathophysiology, Causes, and Development of Ureteral Calculus and its Clinical Features, Diagnostic tools and Imaging studies, Management Plans, and Complications.	CC	MK	K	SIM,CBL,PER,TUT,BL	PRN,CL-PR,P-VIVA,P-CASE,P-EXAM	F&S	III	-	NLHT46.4
CO1, CO3, CO5	Define Aetiopathogenesis, Classification, Clinical Features & Management of Tumours of the Kidney.	CC	MK	K	L,L_VC,PER,L&PPT,L&GD	PRN,P-VIVA,P-EXAM,T-CS	F&S	III	-	LH
CO1, CO3, CO5	Discuss the Pathophysiology and Clinical Presentation, Diagnostic approach and Management Strategies of CKD, Perinephric Abscess, and Renal Calculus.	PSY-GUD	MK	K	PSM,PL,TUT,RLE,CBL	VV-Viva,PRN,C-VC,P-VIVA,P-EXAM	F&S	III	-	NLHP46.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 46.1		
NLHT 46.2	Congenital anomalies of Kidney, Ureter & Polycystic Kidney discussion.	**Case Study Analysis**: Review and discuss case studies of patients with congenital kidney and ureter anomalies and polycystic kidney disease. **Diagnostic Techniques Workshop**: Practice using diagnostic tools like ultrasonography, CT, and MRI to identify these anomalies.

		Symptom Simulation: Use simulations to understand and identify the clinical presentations of these conditions.. **Classification Exercises**: Engage in exercises to classify different congenital anomalies of the kidney and ureter. **Complication Scenario Management**: Work through scenarios where students must manage complications arising from these conditions. **Treatment Plan Development**: Create comprehensive management and treatment plans for hypothetical patients. **Group Discussions**: Facilitate discussions on the aetiopathogenesis and clinical features of these conditions.
NLHT 46.3	Demonstration of Injuries to the Kidneys And Ureters.	**Case Study Review**: Analyze and discuss case studies involving kidney and ureter injuries. **Imaging Analysis**: Review and interpret imaging studies of kidney and ureter injuries. **Role-Playing**: Simulate patient interviews and history taking to practice identifying possible causes and symptoms of injuries. **Management Scenarios**: Engage in scenarios to develop and implement management plans for patients with kidney and ureter injuries. **Complication Management**: Discuss and simulate the management of complications arising from these injuries. **Group Discussions**: Facilitate discussions on the mechanisms, diagnosis, and management of kidney and ureter injuries.
NLHT 46.4	Ureteral Stone examination.	**Case Study Analysis**: Review and discuss case studies of patients diagnosed with ureteral stones. **Imaging Interpretation**: Analyze and interpret imaging studies to locate and assess ureteral stones. **Symptom Simulation**: Use simulations to understand and identify the clinical presentation and symptoms of ureteral stones. **Treatment Plan Exercises**: Develop and present comprehensive management and treatment plans for patients with ureteral stones. **Surgical Simulation**: Participate in surgical simulations of procedures such as ureteroscopy and

		lithotripsy. **Complication Management**: Engage in scenarios to identify and manage complications arising from ureteral stones and their treatment. **Group Discussions**: Facilitate discussions on best practices and guidelines for the management of ureteral stones.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 46.1	Case presentation on CKD, Perinephric Abscess & **R**enal Calculus on patients, or simulator.	**Steps** Class Discussion/Case Presentation Introduction: Briefly introduce CKD, perinephric abscess, and renal calculus. State the objectives of the discussion/presentation. Case Descriptions: CKD: Present a case of a patient with gradual decline in kidney function, discussing symptoms such as fatigue, edema, and changes in urine output. Perinephric Abscess: Describe a patient with fever, flank pain, and a history of urinary tract infection. Renal Calculus: Explain a case of a patient with severe flank pain, hematuria, and a history of kidney stones. Diagnostic Approach: Discuss the diagnostic steps for each condition, including history, physical examination, lab tests, and imaging studies. Highlight the differences in diagnostic approaches for each condition. Management Strategies: CKD: Focus on managing underlying causes, controlling blood pressure, and dietary modifications. Perinephric Abscess: Emphasize the importance of antibiotics, drainage, and monitoring for complications. Renal Calculus: Discuss pain management, hydration, and the use of medications or procedures like ESWL or PCNL.

		Q&A Session: Encourage questions and discussions from the audience. Clarify any doubts and provide additional insights. Video Demonstration/Role Play Preparation: Prepare scripts or scenarios for each condition. Assign roles to participants (e.g., patient, doctor, nurse). Demonstration: CKD: Show a patient consultation, discussing symptoms and management plans with the doctor. Perinephric Abscess: Act out an emergency room scenario with diagnosis and initial treatment. Renal Calculus: Demonstrate a patient's experience with acute pain and the steps taken for diagnosis and treatment. Debriefing: Discuss the key points from each demonstration. Highlight the learning objectives and take-home messages.

Topic 47 Mutrashaya Vikara (Diseases of Urinary bladder) (LH :3 NLHT: 2 NLHP: 4)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO3, CO5	Analyze the anatomy, physiology, and histology of the urinary bladder while evaluating congenital anomalies, diagnostic methods, and management strategies.	CAN	MK	K	L&GD, LRI,TUT,PER, CBL	VV-Viva,M-POS,QZ ,M-CHT, C-VC	F&S	III	V-RS,V-KS,V-RS	NLHT47.1
CO1, CO3, CO5	Define the Aetiopathogenesis, Classification, Clinical Features & Management of Cystitis.	CK	MK	K	L&PPT ,L	C-VC,PP-Practical,PM, QZ ,P-VIVA	F&S	III	-	LH
CO1,	Define the Aetiopathogenesis, Classification, Clinical Features &	CK	MK	K	L&PPT	T-CS,P-VI	F&S	III	-	LH

CO3, CO5	Management of Vesicular Calculus.				,L	VA,P-POS, VV-Viva				
CO1, CO3, CO5	Define Aetiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management of Urinary Bladder Dysfunction (Neurogenic bladder) and Carcinoma of Urinary Bladder.	CK	MK	K	L&PPT ,PL,PrB L,FC,P ER	T-CS,CL-P R,INT,PRN ,O-QZ	F&S	III	-	LH
CO1, CO2, CO3, CO4, CO5, CO6	Demonstrate the Indications and Contraindications, step-by-step process for Suprapubic catheterization, Cystoscopy, PCNL,& ESWL.	PSY-GUD	MK	KH	TUT,PL ,BL,CD, D-BED	DEB,INT,P -EXAM,C HK,Mini-CEX	F&S	III	-	NLHP47.1
CO1, CO3, CO5	Elaborate on the underlying Pathophysiology, Clinical Features, Physical Examination, Management, and Complications of Haematuria and Anuria.	CC	MK	K	DIS,BL, L&GD, TUT,PE R	CL-PR,P-E XAM,P-VI VA,PRN, C-VC	F&S	III	-	NLHT47.2
CO1, CO3, CO5	Identify Aetiopathology, signs and symptoms, and Examination of Urinary System Disorders.	CK	MK	K	PER,TU T,CD,D -BED,SI M	P-VIVA,P-EXAM,CH K,VV-Viva ,Mini-CEX	F&S	III	-	NLHP47.2

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 47.1	Surgical Anatomy of Bladder & Congenital Anomalies of Blader.	**Anatomy Dissection**: Conduct detailed dissections to study the bladder's anatomical structure. **Histology Lab**: Analyze histological slides of bladder tissue. **Surgical Simulation**: Engage in simulations of common bladder surgeries, focusing on anatomical landmarks and variations. **Clinical Case Discussions**: Discuss clinical cases involving congenital anomalies of the bladder and

		their surgical management. **Group Discussions**: Facilitate group discussions on the anatomical and physiological implications of congenital anomalies.
NLHT 47.2	Demonstration of Haematuria, Anuria -An evaluation.	**Case Study Review**: Analyze and discuss case studies of patients presenting with haematuria and anuria. **Symptom Simulation**: Use simulations to understand and identify the clinical presentation of haematuria and anuria. **Management Plan Development**: Develop management and treatment plans for hypothetical patients. **Complication Scenario Exercises**: Engage in scenarios where students must identify and manage complications arising from haematuria and anuria. **Group Discussions**: Facilitate discussions on differential diagnosis and appropriate diagnostic pathways.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 47.1	Suprapubic catheterization, Cystoscopy, PCNL,& ESWL on patients or simulators.	**Steps** Suprapubic Catheterization **Preparation:** Wash hands and wear sterile gloves. Explain the procedure and obtain consent. Position the patient in the supine position. **Procedure:** Clean and drape the suprapubic area. Administer local anesthesia. Insert the needle above the pubic symphysis into the bladder. Advance the catheter through the needle into the bladder. Secure the catheter and connect to a drainage bag.

Completion:
Ensure proper drainage and monitor for complications.
Cystoscopy
Preparation:
Wash hands and wear sterile gloves.
Explain the procedure and obtain consent.
Position the patient in the lithotomy position.
Procedure:
Clean and drape the perineal area.
Administer local anesthesia.
Insert the cystoscope through the urethra into the bladder.
Visualize the bladder and urethra, checking for any abnormalities.
Perform any necessary interventions (e.g., biopsy).
Completion:
Remove the cystoscope and monitor the patient.
Percutaneous Nephrolithotomy (PCNL)
Preparation:
Wash hands and wear sterile gloves.
Explain the procedure and obtain consent.
Position the patient in the prone position.
Procedure:
Clean and drape the back and flank area.
Administer local or general anesthesia.
Insert the needle into the kidney through the skin.
Dilate the tract and insert a nephroscope.
Fragment and remove kidney stones using appropriate instruments.
Completion:
Ensure all stones are removed and check for complications.
Place a nephrostomy tube for drainage if necessary.
Extracorporeal Shock Wave Lithotripsy (ESWL)

		Preparation: Wash hands and wear sterile gloves. Explain the procedure and obtain consent. Position the patient on the lithotripter table. Procedure: Apply ultrasound gel to the treatment area. Use imaging (X-ray or ultrasound) to locate the kidney stones. Deliver shock waves to break the stones into smaller fragments. Completion: Monitor the patient for complications. Advise the patient on hydration and follow-up imaging.
NLHP 47.2	Examination of Urinary System Disorders.	**Steps** Preparation: Wash hands and wear appropriate PPE. Introduce yourself to the patient and explain the procedure. Obtain consent from the patient. History Taking: Ask about urinary symptoms such as frequency, urgency, dysuria, hematuria, and nocturia. Inquire about past medical history, including urinary tract infections, kidney stones, and any surgeries. Discuss any medications the patient is taking that may affect the urinary system. General Inspection: Observe the patient for signs of discomfort or distress. Check for any visible abdominal swelling or asymmetry. Palpation: Palpate the abdomen for tenderness, masses, or bladder distension. Perform a focused examination of the kidney area (costovertebral angle tenderness). Check for any lower abdominal tenderness or masses that may indicate bladder issues. Percussion: Percuss the bladder area to assess for distension.

		Check for any dullness over the bladder region. Auscultation: Listen to the abdominal area for bowel sounds to rule out any gastrointestinal involvement. Special Tests: Urine Dipstick Test: Test for the presence of blood, protein, glucose, and other abnormalities in the urine. Post-Void Residual (PVR): Measure the amount of urine left in the bladder after urination to assess for incomplete emptying. Documentation: Record the patient's history, symptoms, and examination findings. Note any abnormalities detected during the examination. **Recapitulation:** Thorough Examination: A comprehensive examination of the urinary system is crucial for diagnosing and managing urinary disorders. Patient Communication: Clearly explain the findings and next steps to the patient.

Topic 48 Mutraghata and Mutrakrichra (LH :2 NLHT: 0 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO2, CO4	Explain the Causes, Diagnosis, Clinical Features & Management of Mutrakrichra.	CC	MK	K	L,L&PPT	PP-Practical,VV-Viva, P-VIVA,T-CS	F&S	III	-	LH
CO1, CO3, CO4	Explain the Causes, Diagnosis, Clinical Features & Management of Mutraghata.	CC	MK	K	L&PPT,L	VV-Viva,P-EXAM,P-VIVA,PRN,PP-Practical	F&S	III	-	LH
CO1, CO2,	Demonstrate the Uttarabasti procedure step-by-step and its therapeutic benefits, indications and contraindications, and post-	PSY-GUD	MK	K	D,CBL, BL,DIS,	QZ ,VV-Viva,PP-Pract	F&S	III	-	NLHP48.1

CO4, CO5	procedure care..				PER	ical,P-CAS E,P-EXAM					

Non Lecture Hour Theory		
S.No	**Name of Activity**	**Description of Theory Activity**

Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 48.1	Demonstration of Uttarabasti procedure for Urethral Stricture / BPH with Indication, contraindication, and precautions.	**Steps** Preparation: Wash hands and wear appropriate PPE. Explain the procedure to the patient or simulation model and obtain consent. Patient Positioning: Position the patient in the lithotomy position (lying on the back with knees flexed and feet in stirrups). Ensure proper draping to maintain a sterile field. Catheter Insertion: Lubricate the catheter and gently insert it into the urethra (for males) or vaginal canal (for females). Advance the catheter carefully to the bladder or uterus, depending on the patient's gender. Medication Administration: Administer the prescribed liquid medicine (herbal decoction or medicated oil) through the catheter. Ensure the correct dosage is delivered and monitor the patient for any immediate reactions. Completion: Remove the catheter gently and ensure the patient is comfortable. Dispose of the catheter and other used materials properly. Post-Procedure Care: Monitor the patient for any signs of discomfort, infection, or adverse reactions. Provide post-procedure care instructions, including hydration and rest. Indications Urinary Problems: Such as urinary tract infections, cystitis, and urethral stricture.

		Prostate Enlargement: To reduce symptoms of benign prostatic hyperplasia (BPH). Infertility: In females, for conditions like blocked fallopian tubes and endometriosis. Menstrual Disorders: Such as dysmenorrhea and amenorrhea. Contraindications Infections: Active infections in the urinary or genital tract. Recent Surgery: Recent surgical procedures in the area. Allergies: Known allergies to the medications used in the procedure. Precautions Hygiene: Maintain strict hygiene to prevent infections. Patient Comfort: Ensure the patient is comfortable and informed throughout the procedure. Monitoring: Regularly monitor the patient for any adverse reactions or complications.

Topic 49 Paurusha Granthi Vikara (Diseases of Prostate) (LH :3 NLHT: 1 NLHP: 4)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO4, CO5	Illustrate the Anatomical, Physiological Structure, and Histological Features of the prostate. Explain Master Imaging Techniques with common surgical procedures involving the prostate.	CAP	MK	K	LRI,RP, D-BED, TUT,DIS	T-CS,PRN, VV-Viva, C-VC,CL-PR	F&S	III	-	NLHT49.1
CO1, CO3, CO5	Explain the Aetiopathogenesis, Classification, Clinical features, Diagnosis, Complications, and Management of Prostatitis and Prostatic Abscess.	CC	MK	K	L,L&PPT	T-CS,INT, C-VC,VV-Viva,PRN	F&S	III	-	LH
CO1, CO3, CO5	Define Aetiopathogenesis, Clinical Features & Management of Benign Prostate Hypertrophy.	CK	MK	K	LRI,L,L&PPT	PP-Practical,CL-PR,PRN,T-CS,VV-Viva	F&S	III	-	LH
CO1, CO3,	Demonstrate the skills to identify the clinical features, to perform a systematic examination of BPH, Prostatitis, and Prostatic	PSY-GUD	MK	KH	CD,D-M,CBL,	PP-Practical,CHK,Mini	F&S	III	-	NLHP49.1

CO5	Abscess. Differentiate between BPH, prostatitis, and prostatic abscess.				PBL,PER	-CEX,P-EXAM,OSCE				
CO1, CO3, CO4, CO5	Define the Aetiopathogenesis, Classification, Clinical Features, Diagnosis, Complications, and Management of Carcinoma of Prostate.	CK	DK	K	L,L&PPT	P-VIVA,P-EXAM,CL-PR,PP-Practical,PRN	F&S	III	-	LH
CO1, CO2, CO3, CO5	Demonstrate the procedural steps of TURP, the use of surgical instruments and techniques for TURP, and the importance of precision and care during the procedure.	PSY-GUD	DK	KH	PBL,CD,PER,CBL,TUT	P-EXAM,P-MOD,P-VIVA,PRN,CL-PR	F&S	III	-	NLHP49.2

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 49.1	Surgical anatomy and physiology of Prostate gland.	**Anatomy Dissection**: Hands-on dissection and examination of the prostate to understand its structure. **Histology Slides**: Review and analyze histological slides of prostate tissue. **Imaging Techniques**: Practice using imaging tools like ultrasound, MRI, and CT scans to visualize the prostate. **Surgical Simulation**: Engage in simulations of common prostate surgeries, such as prostatectomy. **Clinical Case Discussions**: Discuss clinical cases involving prostate disorders and their management. **Group Discussions**: Facilitate group discussions on the anatomical variations and physiological functions of the prostate

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 49.1	Demonstration of BPH, Prostatitis, and Prostatic Abscess on patients or simulators.	**Steps** Preparation: Wash hands and wear appropriate PPE.

		Introduce yourself to the patient or simulation model and explain the procedure. Obtain consent from the patient or explain the purpose of the demonstration. General Inspection: Ask the patient to stand and then lie down. Observe the abdomen and perineal area for any visible swelling, asymmetry, or discoloration. Palpation: BPH: Palpate the prostate through the rectum (digital rectal examination) to assess size, consistency, and tenderness. BPH typically presents as an enlarged, firm, and non-tender prostate. Prostatitis: Palpate the prostate to check for tenderness, warmth, and swelling. Prostatitis often presents with a tender, boggy, and warm prostate. Prostatic Abscess: Palpate the prostate to identify a fluctuating mass or abscess. Prostatic abscesses are usually tender, and warm, and may have fluctuance. Special Tests: Transillumination: Shine a light through the scrotum to differentiate between solid and fluid-filled masses (if applicable). Prehn's Sign: Elevate the scrotum to see if the pain is relieved (positive in epididymitis, negative in testicular torsion). Auscultation (Optional): Listen for bowel sounds if a hernia is suspected. Documentation: Record your findings, including the size, location, and characteristics of any abnormalities. Note any associated symptoms such as pain, fever, or urinary symptoms.
NLHP 49.2	Procedure of TURP on the patients or simulators.	**Steps** Preparation: Set up the simulation environment or patient setup. Ensure all necessary equipment, including the resectoscope, irrigation system, and electrocautery unit, is ready and functioning. Introduce the procedure to the audience, explaining the purpose and steps.

		Patient Positioning: Position the patient or simulation model appropriately, typically in the lithotomy position. Ensure proper draping to maintain a sterile field. Insertion of the Resectoscope: Lubricate the resectoscope and gently insert it into the urethra. Advance the resectoscope to the prostate, ensuring clear visualization of the prostate and urethra. Visualization and Resection: Use the resectoscope to visualize the prostate and identify the verumontanum and ureteral orifices. Carefully resect the prostate tissue using the wire loop, ensuring to avoid perforation of the prostate capsule. Use electrocautery to control bleeding during the resection. Irrigation and Removal: Continuously irrigate the surgical field with sterile fluid to clear away resected tissue and maintain visibility. Remove the resected tissue from the bladder through the urethra. Completion: Once the resection is complete, remove the resectoscope. Inspect the surgical field for any remaining tissue or complications. Place a catheter to ensure proper drainage and irrigation post-procedure. Post-Procedure Care: Monitor the patient for any immediate complications such as bleeding or infection. Explain post-operative care instructions to the patient or simulation audience. **Recapitulation:** Precision and Care: Emphasize the importance of precision and careful technique to avoid complications such as perforation and excessive bleeding. Continuous Learning: Encourage ongoing practice and learning to improve surgical skills and outcomes. Patient Safety: Highlight the critical role of patient safety and proper post-operative care in ensuring successful recovery.

Topic 50 Mutramarga Vikara (Diseases of Urethra) (LH :2 NLHT: 1 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO1, CO3, CO5	Illustrate the Aetiopathology, Clinical Features, Diagnostic tools, Management and Complications of Urethritis.	CAN	MK	K	BL,DIS, CBL,PT ,ML	C-VC,P-VI VA,PRN,P-EXAM,PP-Practical	F&S	III	-	NLHT50.1
CO1, CO3, CO5	Define Congenital Anomalies of the Urethra and its Aetiopathogenesis & Management.	CK	MK	K	L&PPT ,L	QZ ,SA,VV -Viva,P-VIVA	F&S	III	-	LH
CO1, CO3, CO5	Define Clinical Features & Management of Injuries to Urethra and Urethral Stricture.	CK	MK	K	L,X-Ray,L&PPT	P-VIVA,M-CHT,PRN, M-POS,VV-Viva	F&S	III	-	LH

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 50.1	Case Presentation of Urethritis.	**Case Study Analysis**: Review and discuss case studies of patients with urethritis. **Complication Management Simulation**: Engage in scenarios where students must manage complications arising from urethritis. **Treatment Plan Development**: Create comprehensive treatment plans for hypothetical patients. **Group Discussions**: Facilitate group discussions on the etiology and clinical features of urethritis.

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity

Topic 51 Medhra Vikara (Diseases of Penis) (LH :3 NLHT: 2 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO3	Define Aetiopathogenesis, Classification, Clinical features, Diagnosis, Complications, and Management of Congenital anomalies of Penis, Niruddhaprakasha (Phimosis).	CK	MK	K	L,L&PPT	P-EXAM,P-VIVA,T-CS,PRN,VV-Viva	F&S	III	-	LH
CO1, CO2, CO4	Define Aetiopathogenesis, Classification, Clinical Features, Diagnosis, Complications, and Management of Parivartika (Paraphimosis), Avapatika (Abnormal retraction / Tear of the prepuce).	CK	MK	K	L,L&PPT	PRN,PP-Practical,P-EXAM,T-CS,QZ	F&S	III	-	LH
CO1, CO2, CO4	Define Aetiopathogenesis, Classification, Clinical Features, Diagnosis, Complications and Management of Hypospadias & Epispadias.	CK	MK	K	L&PPT,BL,PER,L,CD	P-VIVA,P-EXAM,CL-PR, C-VC, VV-Viva	F&S	III	-	LH
CO1, CO3, CO5	Explain Aetiopathogenesis and development of Ectopia Vesicae and Balanoposthitis and identify their Clinical Features, Diagnostic Techniques, Treatment Plans, and Complications.	CAN	MK	K	SIM,CBL,DIS,CD,BL	PRN,P-VIVA,P-CASE,P-EXAM,VV-Viva	F&S	III	-	NLHT51.1
CO1, CO3, CO4, CO5	Enumerate the Causes and Progression of Carcinoma of the Penis, Peyronie's Disease, and Granuloma Inguinale with its Management.	CK	DK	K	LRI,CBL,BL,PER,TUT	P-VIVA,PRN,COM,VV-Viva	F&S	III	-	NLHT51.2
CO1, CO3, CO4, CO5	Demonstrate the skills to identify normal and abnormal findings in the Male External Genitalia and differentiate between various conditions affecting the genitalia.	PSY-GUD	MK	K	RP,DIS,CBL,CD,TUT	P-EXAM, Mini-CEX, P-VIVA,DEB,CL-PR	F&S	III	-	NLHP51.1
Non Lecture Hour Theory										

S.No	Name of Activity	Description of Theory Activity
NLHT 51.1	Examination of Ectopia Vesicae & Balanoposthitis.	**Case Study Analysis**: Review and discuss case studies of patients with Ectopia Vesicae and Balanoprosthitis. **Diagnostic Tools Workshop**: Hands-on practice with diagnostic tools and techniques used in identifying these conditions. **Role-Play**: Simulate patient-doctor interactions to practice diagnosing and explaining conditions to patients. **Group Discussions**: Facilitate group discussions on the aetiopathogenesis and clinical features of these conditions.
NLHT 51.2	Examination of Carcinoma of the Penis, Peyronie's Disease & Granuloma Inguinale.	**Case Study Analysis**: Examine and discuss case studies involving each of these conditions. **Role-Playing**: Simulate patient consultations to practice explaining diagnoses and treatment options. **Complication Scenarios**: Engage in scenarios where students must address complications arising from these conditions. **Treatment Plan Exercises**: Develop and present treatment plans for hypothetical patients. **Group Discussions**: Facilitate discussions on the etiopathogenesis and clinical features of these conditions.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 51.1	Examination of Male External Genitalia.	**Steps** Preparation: Wash hands with an antiseptic solution and wear Gloves. Introduce yourself to the patient explain the procedure and Obtain consent. Inspection: Ask the patient to undress and stand and then lie down. Inspect the pubic region, penis, scrotum, and perineum for any visible abnormalities such as swelling,

		discoloration, lesions, or discharge. Palpation: Penis: Gently palpate the shaft of the penis, noting any nodules, plaques, or tenderness. Foreskin: Retract the foreskin (if present) to inspect the glans and urethral meatus. Note any lesions, discharge, or phimosis. Testicles: Palpate each testicle between the thumb and fingers, checking for size, consistency, and tenderness. Normal testicles should be smooth and firm. Epididymis: Palpate the epididymis located at the back of each testicle. It should feel soft and non-tender. Spermatic Cord: Palpate the spermatic cord for any thickening or masses. Special Tests: Transillumination: If there is scrotal swelling and fluid-filled masses. Auscultation (Optional): If a hernia is suspected, listen for bowel sounds in the scrotal region. Documentation: Record your findings, including the size, location, and characteristics of any abnormalities. Note any associated symptoms such as pain or discharge.

Topic 52 Mushka Evum Vrishan Vikara (Diseases of Scrotum and Testis) (LH :2 NLHT: 0 NLHP: 4)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO3, CO5	Define Aetiopathogenesis, Classification, Clinical Features, Diagnosis, Complications, and Management of Epididymo-orchitis, Epididymal cyst, Varicocele, and Spermatocele.	CK	MK	K	L,L&PPT ,BL,L &GD	DEB,PP-Practical,P-EXAM,PRN, P-VIVA	F&S	III	-	LH
CO1, CO3, CO5	Define the Development of Testis & Aetiopathogenesis, Clinical Features, Investigations, Complications & Management of Undescended Testis, Ectopic Testes, and Torsion of the Testis.	CK	MK	K	L&PPT ,L,BL,SDL	P-VIVA,QZ , C-VC,PRN, P-EXAM	F&S	III	-	LH

CO1, CO2, CO4	Demonstrate the skills to identify various types of Scrotal Swellings with their physical examination and Differentiation.	PSY-GUD	MK	KH	DIS,TUT,D,D-BED	OSCE,PRN,VV-Viva, OSPE,P-EXAM	F&S	III	-	NLHP52.1
CO1, CO2, CO4	Demonstrate the skills to identify different types of swellings in the Inguinoscrotal region with their thorough examination to distinguish between various conditions. Differentiate between Hydrocele, Epididymal Cyst, Testicular Tumour, and other swellings.	PSY-GUD	MK	K	BL,DIS,PER,D,TUT	CHK,OSPE,P-EXAM,DEB,OSCE	F&S	III	-	NLHP52.2

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 52.1	Examination of Scrotal Swelling.	**Steps** Preparation: Wash hands with an antiseptic solution and wear Gloves. Introduce yourself to the patient and explain the procedure. Obtain consent from the patient. General Inspection: Ask the patient to undress and stand and then lie down. Observe the scrotum for any visible swelling, asymmetry, or discoloration. Palpation: Hydrocele: Feel for a smooth, firm, fluid-filled swelling. It will transilluminate with a penlight. Epididymal Cyst: Palpate for a small, painless, fluid-filled cyst located above or behind the testicle. Varicocele: Feel for a “bag of worms” texture, especially prominent when the patient stands or performs the Valsalva maneuver. Testicular Tumor: Palpate for a firm, irregular mass within the testicle that does not transilluminate.

		Orchitis/Epididymitis: Feel for a swollen, tender testicle or epididymis, often accompanied by redness and warmth. Inguinal Hernia: Palpate the inguinal region for any lumps or protrusions that extend into the scrotum. Transillumination: Darken the room. Shine a penlight or small flashlight through the scrotal swelling. Fluid-filled swellings like hydroceles will transilluminate, creating a red glow. Auscultation (Optional): Listen for bowel sounds if a hernia is suspected. Special Tests: Prehn's Sign: Elevate the scrotum to see if the pain is relieved (positive in epididymitis, negative in testicular torsion). Documentation: Record your findings, including the size, location, and characteristics of the swelling. Note any associated symptoms such as pain or discomfort.
NLHP 52.2	Examination of Swelling in the Inguino scrotal region (Except Inguinal and Femoral Hernia).	**Steps** Preparation: Wash hands with antiseptic solution and wear Gloves. Introduce yourself to the patient and explain the procedure and Obtain consent. General Inspection: Ask the patient to stand and then lie down. Observe the inguino-scrotal region for any visible swelling, asymmetry, or discoloration. Palpation: Hydrocele: Feel for a smooth, firm, fluid-filled swelling confined to the scrotum. It will transilluminate with a penlight. Epididymal Cyst: Palpate for a small, painless, fluid-filled cyst located above or behind the testicle. Varicocele: Feel for a “bag of worms” texture, especially prominent when the patient stands or performs the Valsalva maneuver. Testicular Tumor: Palpate for a firm, irregular mass within the testicle that does not transilluminate. Orchitis/Epididymitis: Feel for a swollen, tender testicle or epididymis, often accompanied by redness

		and warmth. Auscultation (Optional): Listen for bowel sounds if a hernia is suspected. Special Tests: Transillumination: Shine a light through the scrotal swelling to differentiate between solid and fluid-filled masses. Prehn's Sign: Elevate the scrotum to see if pain is relieved (positive in epididymitis, negative in testicular torsion). Documentation: Record your findings, including the size, location, and characteristics of the swelling with associated symptoms such as pain or discomfort. **Recapitulation:** Accurate Diagnosis: Early and accurate diagnosis of scrotal swellings is essential for appropriate management and treatment. Patient Education: Inform patients about the importance of seeking medical advice for worsening symptoms. Follow-Up: Regular follow-up is crucial to monitor changes or complications.

Topic 53 Vriddhi Roga (LH :1 NLHT: 0 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO3, CO5	Define Aetiopathogenesis, Classification, Clinical Features, Diagnosis, Complications, and Management of Mutravriddhi (Hydrocele).	CK	MK	K	L,L&GD,L&PPT	PP-Practical,PRN,SP,P-EXAM,VV-Viva	F&S	III	-	LH
CO1, CO2, CO4, CO5	Demonstrate the skills to identify the characteristics and symptoms of Hydrocele with a thorough physical examination to detect Hydrocele. Differentiate between Hydrocele and other Scrotal Swellings.	PSY-GUD	DK	KH	DIS,CBL,BL,TUT,PT	CHK,P-VIVA,PRN,Mini-CEX,OSPE	F&S	III	-	NLHP53.1

Non Lecture Hour Theory		
S.No	**Name of Activity**	**Description of Theory Activity**
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 53.1	Examination of Hydrocele.	**Steps** Preparation: Wash hands with an antiseptic solution and wear Gloves. Introduce yourself to the patient explain the procedure and obtain consent from the patient. General Inspection: Undress the patient and ask to stand up. Observe the scrotum for asymmetry or discoloration. Palpation: Ask the patient to lie down. Gently palpate the scrotum to identify the presence of fluid-filled. Check if the swelling is confined to the scrotum or extends upward into the inguinal canal. Darken the room and test for Transillumination. Shine a penlight or small flashlight through the scrotal swelling. A hydrocele will transilluminate, meaning the light will pass through the fluid-filled swelling, creating a red glow. Auscultation (Optional): Listen for bowel sounds over the scrotum if you suspect an inguinal hernia or bowel involvement. Documentation: Record your findings- the size, location, and characteristics of the Hydrocele and associated symptoms such as pain or discomfort.
Topic 54 Antravriddhi (Hernia) (LH :4 NLHT: 2 NLHP: 4)		

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO4, CO5	Enumerate Surgical Anatomy of Inguinal Canal and Aetiopathology and Classification of Hernia.	CK	MK	K	L&PPT ,BL,L	PRN,VV-Viva,CL-PR, P-EXAM,PP-Practical	F&S	III	-	LH
CO1, CO4, CO5	Explain Aetiopathogenesis, Classification, Clinical Features, Diagnosis of Hernia (AntraVriddhi) (Inguinal Hernia -Direct & Indirect, Enterocele, Omentocele).	CAN	MK	K	PER,L& PPT ,L	P-VIVA,P-EXAM,T-CS,PRN,CL-PR	F&S	III	-	LH
CO1, CO4, CO5	Describe Complications and Management of Inguinal Hernia (Antravriddhi).	CC	MK	K	PER,L& PPT ,L &GD,L, D-BED	P-EXAM,P-VIVA, C-VC,T-CS,PRN	F&S	III	-	LH
CO1, CO2, CO3, CO5	Explain the Surgical Anatomy of the Femoral Canal & Aetiopathogenesis, Clinical Features, Investigations, Complications & Management of Femoral Hernia.	CAN	MK	K	PER,L_ VC,SIM ,L&GD, PT	P-VIVA,DEB,PRN,P-EXAM,T-CS	F&S	III	-	NLHT54.1
CO1, CO2, CO4, CO5	Enumerate Aetiopathogenesis, Classification, Clinical Features, Examinations, Investigations & Diagnosis, Complications, and Management of Epigastric Hernia, Umbilical Hernia, and Paraumbilical hernia.	CK	MK	K	CBL,SIM,PT,TUT,D	OSCE,P-VIVA, C-VC,INT,PRN	F&S	III	-	NLHT54.2
CO1, CO4, CO5	Define Aetiopathogenesis, Classification, Clinical Features, Examinations, Investigations & Diagnosis, Complications, and Management of Incisional Hernia.	CK	MK	K	L,L&PPT	CL-PR,PRN,P-EXAM ,P-VIVA	F&S	III	-	LH
CO1, CO2, CO4,	Identify the Anatomical Landmarks associated with Inguinal Hernias. Perform a detailed physical examination to detect Inguinal Hernias and Differentiate between Direct and Indirect	PSY-GUD	MK	KH	DIS,TUT,SIM,PT,D-	PRN,P-VIVA,CHK,Mini-CEX,P-	F&S	III	-	NLHP54.1

CO5	Inguinal Hernias.				BED	EXAM				
CO1, CO2, CO4, CO5	Identify the characteristics of Umbilical Hernia and Incisional Hernia and perform a systematic examination to detect Hernias. Differentiate between Umbilical Hernia and Incisional Hernia and Communicate findings effectively to the patients.	PSY-GUD	MK	KH	CBL,TUT,D-BED,DIS,CD	Mini-CEX,P-EXAM,CHK,PRN,SP	F&S	III	-	NLHP54.2

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 54.1	Examination of Femoral Hernia.	1. **Anatomy Lab**: Organize a hands-on lab session using cadaver dissections or high-quality anatomical models to explore the surgical anatomy of the femoral canal. Ensure students can identify all relevant structures and understand their spatial relationships. 2. **Role-Playing**: Conduct role-playing sessions where students act as surgeons and patients. The "surgeons" can explain the condition, diagnostic procedures, and treatment options to their "patients," enhancing communication skills and empathy. 3. **Investigation Workshops**: Use diagnostic tools, such as ultrasound, CT scans, and MRIs, to identify and understand femoral hernias. Teach students how to interpret these images and understand their clinical implications. 4. **Surgical Simulation**: If available, use surgical simulation tools to let students practice the procedures involved in diagnosing and managing femoral hernias. This could include virtual surgeries or hands-on practice with mannequins. 5. **Guest Lectures**: Invite experienced surgeons to share their insights and experiences with femoral hernias. They can discuss the latest techniques and challenges in diagnosis and management. 6. **Group Discussions**: Facilitate group discussions on the complications and management strategies of femoral hernias. Encourage students to share their thoughts, ask questions, and

		debate different approaches.
NLHT 54.2	Examination of Epigastric Hernia, Umbilical Hernia, and Paraumbilical Hernia.	1. **Anatomy Lab**: Organize a hands-on lab session using cadaver dissections or high-quality anatomical models to explore the surgical anatomy of the femoral canal. Ensure students can identify all relevant structures and understand their spatial relationships. 2. **Role-Playing**: Conduct role-playing sessions where students act as surgeons and patients. The "surgeons" can explain the condition, diagnostic procedures, and treatment options to their "patients," enhancing communication skills and empathy. 3. **Investigation Workshops**: Use diagnostic tools, such as ultrasound, CT scans, and MRIs, to identify and understand femoral hernias. Teach students how to interpret these images and understand their clinical implications. 4. **Surgical Simulation**: If available, use surgical simulation tools to let students practice the procedures involved in diagnosing and managing femoral hernias. This could include virtual surgeries or hands-on practice with mannequins. 5. **Guest Lectures**: Invite experienced surgeons to share their insights and experiences with femoral hernias. They can discuss the latest techniques and challenges in diagnosis and management. 6. **Group Discussions**: Facilitate group discussions on the complications and management strategies of femoral hernias. Encourage students to share their thoughts, ask questions, and debate different approaches.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 54.1	Examination of Inguinal Hernia.	**Steps of Preparation:**

		Wash hands and wear Gloves. Introduce yourself to the patient and explain the procedure. Obtain consent from the patient. General Inspection: Undress the patient and Ask him to stand up. Observe the inguinal region for any visible bulges or asymmetry. Palpation: Ask the patient to lie down. Palpate the inguinal region, feeling for any lumps or protrusions. Using your index finger, gently invaginate the scrotal skin into the inguinal canal. Ask the patient to cough or perform a Valsalva maneuver and feel for any impulse against your finger. Differentiation: Indirect Inguinal Hernia: Often extends into the scrotum and is felt as a bulge along the inguinal canal. Direct Inguinal Hernia: Typically does not extend into the scrotum and is felt as a bulge medial to the inferior epigastric vessels. Auscultation (Optional): Listen for bowel sounds over the hernia site to rule out bowel obstruction. Documentation: Record your findings, including the size, location, and characteristics of the hernia and associated symptoms such as pain or discomfort.
NLHP 54.2	Examination of Umbilical Hernia and Incisional Hernia.	**Steps** Preparation: Wash hands with an antiseptic solution. Introduce yourself to the patient and explain the procedure. Obtain consent from the patient. General Inspection: Observe the patient's general appearance. Look for any visible bulges or asymmetry in the abdominal area. Palpation:

		Ask the patient to lie down and relax. Gently palpate the abdomen, starting from the umbilicus and moving outward. For umbilical hernia, palpate around the umbilicus to feel for a protrusion. For incisional hernia, palpate along the previous surgical scar to check for any bulging. Auscultation: Use a stethoscope to listen for bowel sounds over the hernia site to rule out bowel obstruction. Special Tests: Ask the patient to cough or perform a Valsalva maneuver (bearing down) to see if the hernia becomes more prominent. For incisional hernia, check for tenderness or signs of infection around the scar. Documentation: Record your findings, including the size, location, and characteristics of the hernia and associated symptoms such as pain or discomfort.

Table 4 : NLHT Activity

(*Refer table 3 of similar activity number)

Activity No*	CO No	Activity details
1.1	CO1	History of surgery
3.1	CO1,CO7	Vranitagara
4.1	CO1,CO2,CO3,CO5	Preoperative assessment
4.2	CO1,CO2,CO4,CO5, CO7	Safe General Surgery
5.1	CO1,CO7	Informed consent in a simulated environment
9.1	CO1,CO2,CO7	Demonstration of Kshar & Kshara Sutra – Preparation, and Method of Application
9.2	CO1,CO2,CO4,CO7	Ksharsutra changing
12.1	CO1,CO2,CO4,CO5	Training of Bandaging on Simulators with relevant modern techniques
14.1	CO1,CO2,CO3,CO4	Electrolyte loss
15.1	CO1,CO2,CO4	Describe Rakta stambhana and methodsof Haemostasis.
15.2	CO1,CO2,CO4,CO6	Describe Blood Transfusion –Blood groups, Compatibility, Indications, Contraindications, Complications, Management. along with Component therapy
19.1	CO1,CO2,CO4	Vranashotha-Nirukti, Nidana, Samprapti, Prakara, Lakshana, Sadhya-asadhyata, Upadrava and Chikitsa
19.2	CO1,CO2,CO5,CO6	Explain etiopathogenesis, types, Clinical Features, Investigations, Differential Diagnosis, complications and management of Kotha (Gangrene)
19.3	CO1,CO2,CO4	Definition, Classification, Clinical features, Complications of Tumour
20.1	CO1,CO2,CO4	Sadhyovrana -(Traumatic wounds) – Nidana, Prakara, Lakshana, Upadrava and Chikitsa.

20.2	CO1,CO2,CO4	Surgical site infection.
22.1	CO1,CO2,CO4	Thyroid gland - anatomy & physiology
22.2	CO1,CO2,CO4	Toxic goiter, Thyroiditis
22.3	CO1,CO2,CO4	Neoplasm of Galaganda (thyroid) -Nidana, Samprapti, Lakshana and Chikitsa
23.1	CO1,CO2,CO4	Surgical Anatomy & Surgical Pathology
27.1	CO1,CO2,CO4	Fracture of scapula & clavicle
27.2	CO1,CO2,CO4	Clinical features, Diagnosis, Complications, and Management of Femur & Patella
27.3	CO1,CO2,CO4	Clinical features, Diagnosis, Complications, and Management of Tibia and Pelvic bones
27.4	CO1,CO2,CO4	Dislocation of joints
27.5	CO1,CO2,CO4	Management of Shoulder & Elbow Dislocation
28.1	CO1,CO2,CO4	Diagnosis, Treatment & Complications of Cysts, Tumours of bones
28.2	CO1,CO2,CO5	Osteoporosis and Paget's disease
29.1	CO1,CO3,CO5	Brain tumours and their management
30.1	CO1,CO3,CO5	Ankylosing Spondylitis
31.1	CO1,CO3,CO5	Sthana Vidradhi - Breast abscess
31.2	CO1,CO3,CO5	Fibroadenoma and Fibroadenosis
32.1	CO1,CO3,CO5,CO6	Examination of Pleurisy, Pleural Abscess, Pleural Effusion, Tumours of the Lung
33.1	CO1,CO3,CO5,CO6	Examination of Oesophageal Varices

36.1	CO1,CO3,CO4	Examination of Ascites
36.2	CO1,CO3,CO4,CO5	Examination of Peritonitis
37.1	CO1,CO3,CO6	Examination of Pyloric Stenosis
38.1	CO1,CO3,CO4,CO7	Demonstration of Blind loop syndrome, Short Bowel Syndrome & Typhoid Enteritis
38.2	CO1,CO3,CO6	Examination of Intussusception
39.1	CO1,CO3	Diagnosis of Carcinoma of Colon
40.1	CO1,CO3,CO5	Surgical Anatomy & physiology of Ano Rectal Conditions
40.2	CO1,CO4	Examination of Anorectal Abscesses (Guda Vidradhi) and Bhagandara (Fistula-in-ano)
40.3	CO1,CO2,CO3,CO7	Examination of Fissure in Ano (Parikartika)
40.4	CO1,CO2,CO4	Examination of Pilonidal Sinus, Proctitis, Pruritis Ani & Injuries of Anorectal region
42.1	CO1,CO3,CO6	Examination of the case of Acute Liver Injury
43.1	CO1,CO4,CO5	Surgical anatomy of Gall Bladder, congenital anomalies of Gall Bladder & Basic Investigations
44.1	CO1,CO4	Surgical Anatomy & physiology, Congenital Anomalies of Pancreas
46.1	CO1,CO2	
46.2	CO1,CO3,CO5	Congenital anomalies of Kidney, Ureter & Polycystic Kidney discussion.
46.3	CO1,CO3,CO5	Demonstration of Injuries to the Kidneys And Ureters.
46.4	CO1,CO3,CO5	Ureteral Stone examination.
47.1	CO1,CO3,CO5	Surgical Anatomy of Bladder & Congenital Anomalies of Blader.

47.2	CO1,CO3,CO5	Demonstration of Haematuria, Anuria -An evaluation.
49.1	CO1,CO4,CO5	Surgical anatomy and physiology of Prostate gland.
50.1	CO1,CO3,CO5	Case Presentation of Urethritis.
51.1	CO1,CO3,CO5	Examination of Ectopia Vesicae & Balanoposthitis.
51.2	CO1,CO3,CO4,CO5	Examination of Carcinoma of the Penis, Peyronie’s Disease & Granuloma Inguinale.
54.1	CO1,CO2,CO3,CO5	Examination of Femoral Hernia.
54.2	CO1,CO2,CO4,CO5	Examination of Epigastric Hernia, Umbilical Hernia, and Paraumbilical Hernia.

Table 5 : List of Practicals

(*Refer table 3 of similar activity number)

Practical No*	CO No	Practical Activity details
1.1	CO1,CO3	Surgical case taking
1.2	CO1,CO3,CO4	Special signs and symptoms pertaining to surgery
2.1	CO1,CO2	Demonstration, Comparison & classification of instruments
3.1	CO1,CO2,CO3	Aseptic techniques, sterilization and disinfection of Surgical instruments, OT sterilization
3.2	CO1,CO2,CO4	Hand washing techniques, Donning of Gloves & Gown
4.1	CO1,CO2,CO4,CO6	Demonstration of BLS (Basic life support)
4.2	CO1,CO2,CO4,CO6	Maintenance of an airway / Endotracheal intubation in a mannequin
5.1	CO1,CO2,CO5,CO6	Common minor surgical procedures (Excision of Corn, Cysts, Lipoma, etc)
6.1	CO1,CO2,CO5,CO6	First aid
6.2	CO1,CO2,CO4	Demonstartion of Chhedan(Excision), Bhedan(Incision), Lekhan(scraping) on simulator
6.3	CO1,CO2,CO4	Demonstration of Vedhan & Visravan (Tapping Of abdomen, Hydrocele, ICD) on simulator
6.4	CO1,CO2,CO4	Demonstration of Aharana and Eshana (extraction and probing)on simulator
6.5	CO1,CO2,CO4	Demonstration of Seevan(Suturing & Knots) and minor surgical procedures in patient / simulated environment
7.1	CO1,CO2,CO4,CO6	Hands-on training -Drains
7.2	CO1,CO2,CO4,CO5, CO6	Catheterization -Hands-on training on Simulators
7.3	CO1,CO2,CO6	IV canulation, IM / IV / Subcutaneous / Intradermal Injection

7.4	CO1,CO2,CO4,CO6	Hands On Training- Ryle's tube Insertion
8.1	CO1,CO3,CO7	Marma identification and manipulation techniques in musculoskeletal disorders and Sports injuries
9.1	CO1,CO2,CO4,CO7	Application of Ksharodaka, Kshartaila, Ksharvarti, Ksharpichu in Dushtavrana
9.2	CO1,CO2,CO4,CO7	Demonstration and Hands-on training of Kshar karma in Anorectal disorders (Arsha, Bhagandara, Nadivrana)
10.1	CO1,CO2,CO4,CO7	Hands-on experience with Agnikarma in the pain management of any one disease (Gridhrasi, Avabahuka, etc)
10.2	CO1,CO2,CO4,CO7	Demonstration of Agnikarma in the management of any one surgical disease (Arsha, Charmakeel, etc)
11.1	CO1,CO2,CO4,CO7	Siravedha in the management of any one surgical disease (Grudhrasi, Uttan Vatarakta, etc)
11.2	CO1,CO2,CO4,CO7	Alabu (cupping) procedure in the management of any one surgical disease (Kati Graham, Manya Graha, etc)
11.3	CO1,CO2,CO4,CO7	Jaloukavcharana (Leech Therapy) in the management of any one surgical disease (Vidradhi, Dushtavrana, Koth, etc)
12.1	CO1,CO2,CO4	Perform training of Bandaging on Simulators with relevant modern techniques
12.2	CO1,CO3,CO5	Demonstration of the Transportation of injured patients (Double Human Crutch, Fireman’s Lift, Two-handed Seat, etc) & Recovery Position
13.1	CO1,CO3,CO5	Heimlich maneuver- Hands-on training (Choking)
14.1	CO1,CO3,CO6	Calculations & selections of fluids in various conditions like Dehydration, Shock& Burns
14.2	CO1,CO3,CO6	Acid Base Balance in various conditions like perforation, vomiting, etc
17.1	CO1,CO3,CO6	Demonstration of Chhaya vikiran (X-ray) of Chest, Abdomen, Urology. and Musculoskeletal organs
17.2	CO1,CO5,CO6	Hands on training of different types of Biopsy

17.3	CO1,CO3,CO5,CO6	Avayava pariksha (CT,MRI) of Chest, abdomen, Urology bones & joints
18.1	CO1,CO4,CO7	Surgical intervention according to Shatkriyakala - Special focus on Arsha, Bhagandara, and infective pathology ex.Appendicitis, Cholecystitis, etc.
19.1	CO1,CO2,CO4	Examination of Granthi (lump or Swelling)
19.2	CO1,CO2,CO4,CO6	Emergency management in different types of shock
19.3	CO1,CO3,CO6	Assessment, examination, and documentation of Pramada Dagda (Burn) case
20.1	CO1,CO2,CO4	Examination of an Ulcer
20.2	CO1,CO2,CO4,CO5	Examination of the peripheral nerve lesions
20.3	CO1,CO2,CO4	Demonstration of wound dressings
21.1	CO1,CO2,CO4	Examination of the Hand
22.1	CO1,CO2,CO4	Examination of Galaganda (thyroid gland)
22.2	CO1,CO2,CO4	Examination of the Gala (Neck)
22.3	CO1,CO2,CO4	Examination of a Lymphatic system
23.1	CO1,CO2,CO4	Examination of Varicose Vein
23.2	CO1,CO2,CO4	Examination and differential diagnosis of unilateral and bilateral lower limb edema
24.1	CO1,CO2,CO4	Examination of the Dhamani Vikara (peripheral vascular diseases)
25.1	CO1,CO2,CO3,CO4, CO5	Techniques of Amputation & Complications with examples of individual amputation
25.2	CO1,CO2,CO4	Examinations of Diseases of Snayu Vikara (Muscle, Ligaments, Tendon and Fascia)
26.1	CO1,CO3,CO4	Safety Precautions in the patient of HIV and hepatitis infected Hepatitis B and C Patients

27.1	CO1,CO2,CO4	Examination of the Bone and Joint injuries
27.2	CO1,CO2,CO4	Examination of Injuries about Individual Joints
27.3	CO1,CO2,CO4	Hands on training on traction (skin and skeletal)
27.4	CO1,CO2,CO4	First aid management of fracture cases
28.1	CO1,CO2,CO4	Demonstrate Examination of the diseases of bone
28.2	CO1,CO3,CO5	Examination of pathological joints
28.3	CO1,CO3,CO5	Examination of foot
29.1	CO1,CO3,CO5,CO6	Examination of Head Injuries (Shirobhighaata)
30.1	CO1,CO3,CO4	Hands-on training on 3 stages of neck fracture stabilization with logroll
30.2	CO1,CO2,CO4,CO6	Examination of Spinal Injuries and Abnormalities
31.1	CO1,CO3,CO4,CO5	Examination of the breast and patient education for ‘self-examination of breast.
32.1	CO1,CO3,CO5,CO6	Examination of injuries of the chest (Urah abhigatha)
32.2	CO1,CO3,CO5,CO6	Examination of Diseases of the Chest
33.1	CO1,CO3,CO5	Examination of Dysphagia
35.1	CO1,CO3,CO5,CO6	Examination of Acute Abdomen
37.1	CO1,CO2,CO4	Examination of Abdominal lump
38.1	CO1,CO2,CO4	Per abdominal Clinical Examination.
39.1	CO1,CO2,CO4	Examination of Chronic Abdomen
40.1	CO1,CO2,CO4,CO5	Examination of a Sinus or Fistula and Hands-on training on Simulators
40.2	CO1,CO2,CO3	Examination of Rectal case and Hands-on training on Simulators

41.1	CO1,CO3,CO4,CO6	Examination of Abdominal Injuries
42.1	CO1,CO2,CO4	Demonstration of Surgical anatomy of the liver, Acute Liver Injury in patients, or simulator.
42.2	CO1,CO2,CO4	Demonstration of Diagnosis & Management of Surgical Jaundice with ERCP on patients /simulator.
42.3	CO1,CO2,CO4	Examination of Hepatomegaly & PAIR in Liver Abscess and Hands-on Practice.
42.4	CO1,CO2,CO4,CO6	Demonstration of Paracentesis inpatient or simulator.
42.5	CO1,CO2,CO4	Surgical management of Portal Hypertension
43.1	CO1,CO2,CO4	MRCP & ERCP Demonstration
43.2	CO1,CO2,CO4,CO6	Cholecystitis and Choledocholithiasis Examination
43.3	CO1,CO2,CO4	Case taking and examination of cholecystitis on the patients.
43.4	CO1,CO2,CO4	Case presentation of Carcinoma of Gall Bladder
44.1	CO1,CO2,CO4	Demonstration of Pseudo Pancreatic cyst on patient or simulator.
44.2	CO1,CO2,CO4	Case taking of Pancreatitis with effective communication skills
44.3	CO1,CO2,CO4,CO5	Case presentation of Neoplasm of Pancreas and its management.
45.1	CO1,CO2,CO4,CO6	Case presentation of the Splenic Rupture & Splenomegaly on the patients or simulator.
46.1	CO1,CO3,CO5	Case presentation on CKD, Perinephric Abscess & **R**enal Calculus on patients, or simulator.
47.1	CO1,CO3,CO5	Examination of Urinary System Disorders.
47.2	CO1,CO2,CO3,CO4, CO5,CO6	Suprapubic catheterization, Cystoscopy, PCNL,& ESWL on patients or simulators.
48.1	CO1,CO2,CO4,CO5	Demonstration of Uttarabasti procedure for Urethral Stricture / BPH with Indication, contraindication, and precautions.

49.1	CO1,CO3,CO5	Demonstration of BPH, Prostatitis, and Prostatic Abscess on patients or simulators.
49.2	CO1,CO2,CO3,CO5	Procedure of TURP on the patients or simulators.
51.1	CO1,CO3,CO4,CO5	Examination of Male External Genitalia.
52.1	CO1,CO2,CO4	Examination of Scrotal Swelling.
52.2	CO1,CO2,CO4	Examination of Swelling in the Inguino scrotal region (Except Inguinal and Femoral Hernia).
53.1	CO1,CO2,CO4,CO5	Examination of Hydrocele.
54.1	CO1,CO2,CO4,CO5	Examination of Inguinal Hernia.
54.2	CO1,CO2,CO4,CO5	Examination of Umbilical Hernia and Incisional Hernia.

Table 6 : Assessment Summary: Assessment is subdivided in A to H points

6 A : Number of Papers and Marks Distribution

Subject Code	Papers	Theory	Practical/Clinical Assessment (200)					Grand Total
			Practical	Viva	Elective	IA	Sub Total	
AYUG-ST	2	200	100	70	-	30	200	400

6 B : Scheme of Assessment (Formative and Summative)

PROFESSIONAL COURSE	FORMATIVE ASSESSMENT			SUMMATIVE ASSESSMENT
	First Term (1-6 Months)	Second Term (7-12 Months)	Third Term (13-18 Months)	
Third	3 PA & First TT	3 PA & Second TT	3 PA	**UE****

PA: Periodical Assessment; **TT:** Term Test; **UE:** University Examinations; **NA:** Not Applicable.
******University Examination shall be on entire syllabus

6 C : Calculation Method for Internal assessment Marks

TERM	PERIODICAL ASSESSMENT*					TERM TEST**	TERM ASSESSMENT	
	A 3	B	C	D	E	F	G	H
	1 (15 Marks)	2 (15 Marks)	3 (15 Marks)	Average (A+B+C/3)	Converted to 30 Marks (D/15*30)	Term Test (Marks converted to 30)	Sub Total _/60 Marks	Term Assessment (…./30)
FIRST							E+F	(E+F)/2
SECOND							E+F	(E+F)/2
THIRD						NIL		E
Final IA	Average of Three Term Assessment Marks as Shown in 'H' Column.							
	Maximum Marks in Parentheses *Select an Evaluation Method which is appropriate for the objectives of Topics from the Table 6 D for Periodic assessment. Conduct 15 marks assessment and enter marks in A, B, and C. ** Conduct Theory (100 Marks)(MCQ(20*1 Marks), SAQ(8*5), LAQ(4*10)) and Practical (100 Marks) Then convert to 30 marks.							

6 D : Evaluation Methods for Periodical Assessment

S. No.	Evaluation Methods
1.	Practical / Clinical Performance
2.	Viva Voce, MCQs, MEQ (Modified Essay Questions/Structured Questions)
3.	Open Book Test (Problem Based)
4.	Summary Writing (Research Papers/ Samhitas)
5.	Class Presentations; Work Book Maintenance
6.	Problem Based Assignment
7.	Objective Structured Clinical Examination (OSCE), Objective Structured Practical Examination (OPSE), Mini Clinical Evaluation Exercise (Mini-CEX), Direct Observation of Procedures (DOP), Case Based Discussion (CBD)
8.	Extra-curricular Activities, (Social Work, Public Awareness, Surveillance Activities, Sports or Other Activities which may be decided by the department).
9.	Small Project
10.	Activities Indicated in Table 3 - Column G3 as per Indicated I, II or III term in column I3.

Topics for Periodic Assessments

PA	Paper 1	Paper 2
PA 1	Topic **1 To 3**	-
PA 2	Topic **4 To 7**	-
PA 3	Topic **8 To 12**	-
Term Test 1	Entire Syllabus of Term 1 of 2 papers	
PA 4	Topic **16 To 20**	-
PA 5	Topic **21 To 26**	-
PA 6	-	Topic **27 To 32**
Term Test 2	Entire Syllabus of Term 2 of 2 papers	
PA 7	-	Topic **36 To 42**
PA 8	-	Topic **43 To 48**
PA 9	-	Topic **49 To 54**

6 E : Question Paper Pattern

III PROFESSIONAL BAMS EXAMINATIONS
AyUG-ST
PAPER-I
Time: 3 Hours Maximum Marks: 100
INSTRUCTIONS: All questions compulsory

		Number of Questions	**Marks per question**	**Total Marks**
Q 1	MULTIPLE CHOICE QUESTIONS (MCQ)	20	1	20
Q 2	SHORT ANSWER QUESTIONS (SAQ)	8	5	40
Q 3	LONG ANSWER QUESTIONS (LAQ)	4	10	40
				100

Similar for Paper II.

6 F : Distribution of theory examination

Paper 1 (Fundamentals of Shalya Tantra)					
Sr. No	**A List of Topics**	**B Marks**	**MCQ**	**SAQ**	**LAQ**
1	**Introduction to Shalya Tantra (Introduction to development of surgery)**	15	Yes	Yes	Yes
2	**Yantra and Shastra (Blunt and sharp instruments)**		Yes	Yes	Yes
3	**Nirjantukarana (Sterilization)**		Yes	Yes	No
4	**Sangyaharana (Anaesthesia)**		Yes	Yes	No
5	**Trividha Karma (Pre, Operative and Post Operative care)**		Yes	Yes	Yes
6	**Shastra Karma (Operative procedure)**		Yes	Yes	Yes
7	**Yogya (Experimental Surgical Training)**		Yes	Yes	Yes
8	**Marma (Vital points)**	5	Yes	Yes	No
9	**Kshara Karma**	15	Yes	Yes	Yes
10	**Agnikarma**		Yes	Yes	Yes
11	**Raktamokshana**		Yes	Yes	Yes
12	**Bandha Vidhi**	6	Yes	Yes	No
13	**Pranashta Shalya**		Yes	Yes	No
14	**Fluid, Electrolyte, Acid Base Balance and Nutrition in surgical practice**	5	Yes	No	No
15	**Rakta**		Yes	No	No
16	**Life Saving and Emergency Medicines in surgical practice (Prana Rakshaka and Atyayika Dravya)**	4	Yes	No	No
17	**Naidanik Vidhi (Diagnostic techniques)**		Yes	No	No
18	**Shat Kriyakala in surgical practice**	5	Yes	Yes	No
19	**Samanya Vyadhi Parichaya**	10	Yes	Yes	Yes
20	**Vrana**	10	Yes	Yes	Yes
21	**Kshudra Roga**	3	Yes	No	No
22	**Manya Vikara**	5	Yes	Yes	No
23	**Sira Vikara (Venous Disorders)**	10	Yes	Yes	Yes
24	**Dhamani Vikara (Arterial disorders)**		Yes	Yes	Yes
25	**Snayu Vikara (Diseases of tendons and ligaments)**	5	Yes	No	No
26	**AIDS - HIV and Hepatitis (B and C)**	2	Yes	No	No

Total Marks	**100**	

Paper 2 (Shalya Tantra Chikitsa Siddhanta)					
Sr. No	**A List of Topics**	**B Marks**	**MCQ**	**SAQ**	**LAQ**
27	**Bhagna (Skeletal Injuries)**	10	Yes	Yes	Yes
28	**Asthi Sandhi Vikara (Diseases of Bone and Joints)**	5	Yes	Yes	No
29	**Shirobhighata (Cranio-cerebral Injurie/ Disorders)**	6	Yes	Yes	No
30	**Kasheruka Vikara (Diseases of Spine)**		Yes	No	No
31	**Stana Roga (Diseases of Breast)**	5	Yes	No	No
32	**Urah Vikara (Diseases of Chest)**	3	Yes	No	No
33	**Anna Nalika Vikara (Diseases of Oesophagus)**	2	Yes	No	No
34	**Gulma Roga**	2	Yes	No	No
35	**Shoola Vyadhi**		Yes	No	No
36	**Udara Roga**	5	Yes	Yes	No
37	**Aamashaya Evam Adho-Aamashaya Vikara (Diseases of Stomach and Duodenum)**	12	Yes	Yes	Yes
38	**Kshudrantra Vikara (Diseases of Small Intestine)**		Yes	Yes	Yes
39	**Brihadantra Vikara (Diseases of Large Intestine)**		Yes	Yes	Yes
40	**Guda Vikara (Diseases of Rectum and Anal Canal)**		Yes	Yes	Yes
41	**Udarabhighata (Abdominal Injuries)**		Yes	No	No
42	**Yakrit Vikara (Diseases of Liver)**	15	Yes	Yes	Yes
43	**Pittashaya Vikara (Diseases of Gall Bladder)**		Yes	Yes	Yes
44	**Agnyashaya Vikara (Diseases of Pancreas)**	5	Yes	Yes	No
45	**Pleeha Vikara (Diseases of Spleen)**		Yes	Yes	No
46	**Vrikka Evam Mutravahini Vikara (Diseases of Kidney and Ureters)**	15	Yes	Yes	Yes
47	**Mutrashaya Vikara (Diseases of Urinary bladder)**		Yes	Yes	Yes
48	**Mutraghata and Mutrakrichra**		Yes	Yes	Yes
49	**Paurusha Granthi Vikara (Diseases of Prostate)**		Yes	Yes	Yes
50	**Mutramarga Vikara (Diseases of Urethra)**		Yes	Yes	Yes

51	**Medhra Vikara (Diseases of Penis)**	15	Yes	Yes	Yes
52	**Mushka Evum Vrishan Vikara (Diseases of Scrotum and Testis)**		Yes	Yes	Yes
53	**Vriddhi Roga**		Yes	Yes	Yes
54	**Antravriddhi (Hernia)**		Yes	Yes	Yes
Total Marks		**100**			

6 G : Instructions for UG Paper Setting & Blue print

1. All questions shall be compulsory.
2. Questions shall be drawn based on Table 6F, which provides the topic name, types of questions (MCQ(Multiple Choice Question), SAQ(Short Answer Question), LAQ(Long Answer Question)).
3. The marks assigned in Table 6F for each topic/group of topics shall be considered as the maximum allowable marks for that topic/group of topics.
4. Ensure that the total marks allocated per topic/group of topics do not exceed the limits specified in Table 6F.
5. Refer to Table 6F before setting the questions. Questions shall be framed only from topics where the type is marked as “YES”, and avoided if marked as “NO”.
6. Each 100-mark question paper shall contain:
   - 20 MCQs
   - 8 SAQs
   - 4 LAQs

7. MCQs:
   - Majority shall be drawn from the Must to Know part of the syllabus.
   - Questions from the Desirable to Know part of syllabus shall not exceed 3.
   - Questions from the Nice to Know part of syllabus shall not exceed 2.

8. SAQs:
   - Majority shall be drawn from the Must to Know part of the syllabus.
   - Questions from the Desirable to Know part of syllabus shall not exceed 1.
   - No questions shall be drawn from the Nice to Know part of syllabus.
   - SAQs shall assess understanding, application, and analysis, rather than simple recall.

9. LAQs:
   - All LAQs shall be drawn exclusively from the Must to Know part of the syllabus.
   - No questions shall be taken from the Desirable to Know or Nice to Know part of the syllabus.
   - Number of LAQs should not exceed one per topic unless maximum marks exceed 20 for the topic.

10. Long Answer Questions shall be structured to assess higher cognitive abilities, such as application, analysis, and synthesis.
11. Follow the guidelines in User Manual III for framing MCQs, SAQs, and LAQs.

6 H : Distribution of Practical Exam

S.No	Heads	Marks
1	Spotting (Instruments, X-ray and Drugs etc) - 5 spots 4 marks each.	20
2	Clinical case taking (One case)	30
3	Demonstration of procedures: Demonstration of surgical and parasurgical procedures	40
4	Records : 1. 10 Instruments with diagrams 2. 10 Records of surgical and parasurgical procedures (CPR,CATHERIZATION,ENDOTRECHIAL INTUBATION) 3. 10 IPD case sheets of Shalyatantra 4. 10 OPD case sheets of Shalyatantra	10
5	Viva Voce • Structured Viva • Questions (assessing clinical skills) on paper 1 - 30 Marks • Questions (assessing clinical skills) on paper 2 - 30 Marks • Communication Skill - 10 Marks	70
6	Marks of Internal assessment	30
Total Marks		**200**

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3.	Dr. Sumith Kumar M, Associate Professor, Guru Gorakshnath Institute of Medical Sciences, Gorakhpur, Uttar Pradesh
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Abbreviations

Domain		T L Method		Level		Assessment		Integration	
CK	Cognitive/Knowledge	L	Lecture	K	Know	T-CS	Theory case study	V-RS	V RS
CC	Cognitive/Comprehension	L&PPT	Lecture with PowerPoint presentation	KH	Knows how	T-OBT	Theory open book test	V-KS	V KS
CAP	Cognitive/Application	L&GD	Lecture & Group Discussion	SH	Shows how	P-VIVA	Practical Viva	H-KC	H KC
CAN	Cognitive/Analysis	L_VC	Lecture with Video clips	D	Does	P-REC	Practical Recitation	H-SH	H SH
CS	Cognitive/Synthesis	REC	Recitation			P-EXAM	Practical exam	H-PK	H PK
CE	Cognitive/Evaluation	SY	Symposium			PRN	Presentation	H-SHL	H SHL
PSY-SET	Psychomotor/Set	TUT	Tutorial			P-PRF	Practical Performance	H-SP	H SP
PSY-GUD	Psychomotor/Guided response	DIS	Discussions			P-SUR	Practical Survey	H-KB	H-KB
PSY-MEC	Psychomotor/Mechanism	BS	Brainstorming			P-EN	Practical enact	H-Samhita	H-Samhita
PSY-ADT	Psychomotor Adaptation	IBL	Inquiry-Based Learning			P-RP	Practical Role play	V-DG	V DG
PSY-ORG	Psychomotor/Origination	PBL	Problem-Based Learning			P-MOD	Practical Model	V-RN	V RN
AFT-REC	Affective/ Receiving	CBL	Case-Based Learning			P-POS	Practical Poster	V-RS	V RS
AFT-RES	Affective/Responding	PrBL	Project-Based Learning			P-CASE	Practical Case taking	V-AT	V AT
AFT-VAL	Affective/Valuing	TBL	Team-Based Learning			P-ID	Practical identification	V-SW	V SW
AFT-SET	Affective/Organization	TPW	Team Project Work			P-PS	Practical Problem solving		
AFT-CHR	Affective/ characterization	FC	Flipped Classroom			QZ	Quiz		
PSY-PER	Psychomotor/perception	BL	Blended Learning			PUZ	Puzzles		
PSY-COR	Psychomotor/ Complex Overt Response	EDU	Edutainment			CL-PR	Class Presentation		
		ML	Mobile Learning			DEB	Debate		
		ECE	Early Clinical Exposure			WP	Word puzzle		
		SIM	Simulation			O-QZ	Online quiz		
		RP	Role Plays			O-GAME	Online game-based assessment		
		SDL	Self-directed learning			M-MOD	Making of Model		
		PSM	Problem-Solving Method			M-CHT	Making of Charts		
		KL	Kinaesthetic Learning			M-POS	Making of Posters		

		W	Workshops			C-INT	Conducting interview		
		GBL	Game-Based Learning			INT	Interactions		
		LS	Library Session			CR-RED	Critical reading papers		
		PL	Peer Learning			CR-W	Creativity Writing		
		RLE	Real-Life Experience			C-VC	Clinical video cases		
		PER	Presentations			SP	Simulated patients		
		D-M	Demonstration on Model			PM	Patient management problems		
		PT	Practical			CHK	Checklists		
		X-Ray	X-ray Identification			Mini-CEX	Mini-CEX		
		CD	Case Diagnosis			DOPS	DOPS		
		LRI	Lab Report Interpretation			CWS	CWS		
		DA	Drug Analysis			RS	Rating scales		
		D	Demonstration			RK	Record keeping		
		D-BED	Demonstration Bedside			COM	Compilations		
		DL	Demonstration Lab			Portfolios	Portfolios		
		DG	Demonstration Garden			Log book	Log book		
		FV	Field Visit			TR	Trainers report		
						SA	Self-assessment		
						PA	Peer assessment		
						360D	360-degree evaluation		
						PP-Practical	Practical		
						VV-Viva	Viva		
						DOAP	Demonstration Observation Assistance Performance		
						SBA	Scenario Based Assessment		
						CBA	Case based Assessment		
						S-LAQ	Structured LAQ		
						OSCE	Observed Structured Clinical Examination		
						OSPE	Observed Structured Practical Examination		
						DOPS	Direct observation of procedural skills		

Name of College with LOGO

AYURVEDACHARYA (B.A.M.S.)

THIRD PROFESSIONAL B.A.M.S.

<< Subject Name >>

(SUBJECT CODE : AyUG-)

JOURNAL /ACTIVITY BOOK

Name of the student :

Institutional Roll No. :

Examination Reg. No. :

Academic Year :

(Name of the College)

(Affiliated to –National Commission for Indian System of Medicines, New Delhi &

Name of the University)

Name of the department

Batch- _____

Certificate

This is to certify that, Mr. / Ms. _____, Enrolment Number-_____ has satisfactorily completed the Practicals in (Subject Name) prescribed by the (Name of University) as a part of the Third Professional B.A.M.S. Course.

Examination Seat No.: _____

Sign. of Teacher Sign. of H.O.D.

Date of Examination- _____

Sign. Of Internal Examiner-_____

Sign. Of External Examiner-_____

JOURNAL /ACTIVITY BOOK

<< Subject name >>

(SUBJECT CODE : AyUG -)

Journal Cum Activity Book

DEPARTMENT OF

<< Name of Department >>

Name of the College

INDEX

Sr no	Topic	Date	Page no
1			
2			
3			
4			

Sl.No	Minimum No of cases / procedure/ activities to be included as per the following guidelines
1.	**Surgical instruments –** Any 10 instruments among Boyle's apparatus, Cautery machine, OT Fumigator, Foley's catheter, Ryles tube, Endotracheal tube, Ambu Bag, Laryngoscope with different blades, Vacuum machine, Autoclave machine, Mayo Trolleys, Abdominal retractor, Artery forceps, Allis forceps, Proctoscope, Urinary dilator, Volkmann's Scope, Mosquito forceps, Curved scissors, Bark-Parker handle, Babcocks Forceps, Sinus forceps, Anorectal Probe, Needle holder, Suturing Needles and Cheatle forceps.
2.	**Surgical/ Parasurgical/ Ward Procedures practiced in the Hospital – (Any 10 Procedures)** 1. IV Cannulation 2. CPR 3. Catheterization 4. Endotracheal intubation 5. Abdomen paracentesis 6. Ryle's tube insertion 7. Suturing 8. Bandaging 9. Alabu (Cupping) Raktamokshana 10. Jaloukavacharana 11. Siravedha 12. Agnikarma 13. Kshara Karma **14.** Kshara Sutra etc.
3.	**Long Surgical Case-10**
4.	**Short Surgical Case -10**

SURGICAL INSTRUMENTS

1. **Name of Instrument:**

2. **Equivalent Classical Instrument Name:**

3. **Draw Neat Labelled Diagram:**

4. **Uses/Applications:**

LIST OF COMMON SURGICAL/ PARASURGICAL/ WARD PROCEDURES

Format for Procedure Writing:

- **Name of the Procedure: -**
- **Indication for the Procedure: -**

- **Contraindications for the Procedure: -**

- **Type of Anaesthesia Used: -**

- **Drug used for Anaesthesia: -**

- **Instruments Required: -**

- **POORVA KARMA (Preoperative Assessment): -**

- **PRADHANA KARMA (Steps of the Procedure): -**

- **PASCHAT KARMA (Post-Operative Care): -**

- **Possible Postoperative Complications and their management: -**

- **TERMINATION – end result of the procedure done**

LONG SURGICAL CASE

Name of Patient:	**Date:**
Age:	**OPD No:**
Sex:	**IPD No:**
Occupation:	**DOA:**
Religion:	**DOD:**
Place:	**Name of the Surgeon:**
	Final Diagnosis:

Pradhana Vedana/Chief Complaints:

Anubandhi Vedana/Associated Complaints:

Pradhan Vedana Vrittanta/History of Present illness:

Poorva Vedana Vrittanta/Past History:

Vaiktika Vrittanta/Personal History:

Ahara:	Jataragni:
Vihara:	Bala:
Vyasana:	Nidra:

Prakriti:

Menstrual history (in females):

Ashtavidha Pareeksha:

Nadi:	Shabda:
Mala:	Sparsha:
Mutra:	Akruti:
Jihva:	Drik:

Samanya Pareeksha/General Examination

Vital Data

Pulse rate:	Pallor:
BP:	Icterus:
Temp:	Cyanosis:
Respiratory rate:	Clubbing:
Built:	Oedema:
Nourishment:	Lymphadenopathy:
Weight:	
Height:	

Samsthanika Pareeksha/Systemic Examination:

Respiratory System-

Cardiovascular System-

Central Nervous System-

Locomotor System –

Uro-genital System -

Per Abdomen Examination-

Others -

Sthanika Pareeksha/Local Examination:

Darshana:

Sparshana:

Aakhotana:

Shravana:

Prayoga Shala Pareeksha/Investigations:

Blood -

Urine -

Stool -

Radiological -

Others –

SambhavitaVyadhi/Provisional Diagnosis:

Vyavacchedaka Nidana/Differential diagnosis:

VyadhiVinischaya/Final Diagnosis:

Chikitsa/Management:

Chikitsa Sootra:

Poorva Karma/ Pre-operative notes:

Pradhana Karma/Operative notes:

Paschat Karma/Post-operative notes:

Result: Cured / Improved / Unchanged /LAMA/Expired/any other

Signature of Surgeon **Signature of Student**

SHORT SURGICAL CASE

Name of Patient:	**Date:**
Age:	**OPD No:**
Sex:	**IPD No:**
Occupation:	**DOA:**
Religion:	**DOD:**
Place:	**Name of the Surgeon:**
	Final Diagnosis:

Pradhana Vedana/Chief Complaints:

Anubandhi Vedana/Associated Complaints:

Pradhan Vedana Vrittanta/History of Present illness:

Poorva Vedana Vrittanta/Past History:

Vaiktika Vrittanta/Personal History:

Ahara:	Jataragni:
Vihara:	Bala:
Vyasana:	Nidra:
Prakriti:	

Menstrual history (in females):

Ashtavidha Pareeksha:

Nadi:	Shabda:
Mala:	Sparsha:
Mutra:	Akruti:
Jihva:	Drik:

Samanya Pareeksha/General Examination

Vital Data

Pulse rate:	Pallor:
BP:	Icterus:
Temp:	Cyanosis:
Respiratory rate:	Clubbing:
Built:	Oedema:
Nourishment:	Lymphadenopathy:
Weight:	
Height:	

Samsthanika Pareeksha/Systemic Examination:

Respiratory System-

Cardiovascular System-

Central Nervous System-

Locomotor System –

Uro-genital System -

Per Abdomen Examination-

Others -

Sthanika Pareeksha/Local Examination:

Darshana:

Sparshana:

Aakhotana:

Shravana:

Prayoga Shala Pareeksha/Investigations:

Blood -

Urine -

Stool -

Radiological -

Others –

SambhavitaVyadhi/Provisional Diagnosis:

Vyavacchedaka Nidana/Differential diagnosis:

VyadhiVinischaya/Final Diagnosis:

Chikitsa/Management:

Result: Cured / Improved / Unchanged /LAMA/Expired/any other

Signature of Surgeon **Signature of Student**

COURSE CURRICULUM FOR THIRD PROFESSIONAL BAMS
(PRESCRIBED BY NCISM)



Shalakya Tantra
(Ophthalmology, Oto-Rhino- Laryngology & Oro-Dentistry)

(SUBJECT CODE : AyUG-SL)

(Applicable from 2021-22 batch, from the academic year 2024-25 onwards for 5 batches or until further notification by NCISM, whichever is earlier)

ncism

।। आयुषे सर्वलोकानाम् ।।

BOARD OF AYURVEDA
NATIONAL COMMISSION FOR INDIAN SYSTEM OF MEDICINE
NEW DELHI-110026

NCISM

III Professional Ayurvedacharya (BAMS)

Subject Code : AyUG-SL

Shalakya Tantra

(Ophthalmology, Oto-Rhino- Laryngology & Oro-Dentistry)

Summary

Total number of Teaching hours: 300			
Lecture (LH) - Theory		**100**	**100(LH)**
Paper I	50		
Paper II	50		
Non-Lecture (NLHT)		**60**	**200(NLH)**
Paper I	30		
Paper II	30		
Non-Lecture (NLHP)		**140**	
Paper I	70		
Paper II	70		

Examination (Papers & Mark Distribution)					
Item	**Theory Component Marks**	**Practical Component Marks**			
		Practical	**Viva**	**Elective**	**IA**
Paper I	100	100	70	-	30
Paper II	100				
Sub-Total	200	200			
Total marks	400				

Important Note :- The User Manual III BAMS is a valuable resource that provides comprehensive details about the curriculum file. It will help you understand and implement the curriculum. Please read the User Manual III before reading this curriculum file. The curriculum file has been thoroughly reviewed and verified for accuracy. However, if you find any discrepancies, please note that the contents related to the MSE should be considered authentic. In case of difficulty and questions regarding curriculum write to **syllabus24ayu@ncismindia.org**

PREFACE

A dynamic and evolving curriculum is crucial in Ayurveda education to prepare future medical professionals who are adaptable, informed, and empathetic. The third professional year plays a pivotal role in bridging foundational knowledge with clinical application, shaping students into competent Vaidyas (physicians). This phase of education must be a living entity, constantly adapting to advancements in healthcare, technology, and patient needs. Shalya Tantra, the Ayurvedic science of surgery, is a critical discipline that blends traditional surgical wisdom with modern innovations, ensuring a comprehensive and holistic approach to surgical education.

This curriculum serves as more than just a framework for knowledge dissemination—it is a structured roadmap designed to foster critical thinking, ethical integrity, and a commitment to lifelong learning. By integrating traditional pedagogical methods with innovative teaching-learning strategies, including case-based learning, hands-on training on simulators, and research-oriented clinical exposure, we aim to redefine surgical education in Ayurveda. It is designed to strengthen diagnostic abilities, enhance surgical skills, and introduce students to evidence-based practice through practical demonstrations, case discussions, and group interactions.

To ensure the global relevance and applicability of Shalya Tantra, the Expert Committee on Competency-Based Dynamic Curriculum has introduced enhancements such as the integration of modern surgical techniques, clinical research updates, and evidence-based practice. This curriculum not only delves into the strengths of Ayurveda in managing lifestyle disorders and non-communicable diseases but also equips students with the necessary skills to navigate an evolving healthcare system. We hope that this curriculum serves as a strong foundation for students, enabling them to achieve clinical excellence and uphold the highest ethical standards in their surgical practice.

INDEX

Course Code and Name of Course 5
Table 1 : Course learning outcomes and mapped PO 5
Table 2 : Contents of Course 6
Paper 1 6
Paper 2 11
Table 3 : Learning objectives of Course 18
Paper 1 18
Paper 2 82
Table 4 : NLHT Activity 167
Table 5 : List of Practicals 171
Table 6 : Assessment Summary: Assessment is subdivided in A to H points 176
6 A : Number of Papers and Marks Distribution 176
6 B : Scheme of Assessment (Formative and Summative) 176
6 C : Calculation Method for Internal assessment Marks 176
6 D : Evaluation Methods for Periodical Assessment 177
6 E : Question Paper Pattern 178
6 F : Distribution of theory examination 179
Paper 1 179
Paper 2 180
6 G : Instructions for UG Paper Setting & Blue print 182
6 H : Distribution of Practical Exam 183
References Books/ Resources 187
Syllabus Committee 191
Abbreviations 196

Course Code and Name of Course

Course code	Name of Course
AyUG-SL	Shalakya Tantra

Table 1 : Course learning outcomes and mapped PO

SR1 CO No	A1 Course learning Outcomes (CO) AyUG-SL At the end of the course AyUG-SL, the students should be able to-	B1 Course learning Outcomes mapped with program learning outcomes.
CO1	Demonstrate clincical application of anatomy and physiology of the Netra, Karna, Nasa, Mukha, Shiras.	PO1
CO2	Identify and understand Nidana-panchaka of diseases in Shalakyatantra according to Ayurveda and contemporary medical science. (Rogapareeksha)	PO1,PO2,PO3
CO3	Conduct appropriate clinical examinations using various diagnostic and imaging techniques, along with appropriate instrument usage and interpretation, as per Ayurveda and contemporary medical sciences.	PO2,PO3
CO4	Present the cases related to Shalakyatantra with clinical reasoning (Naidanika Tarka) along with prognosis (Sadhya-asadhyata) in clinical practice.	PO2,PO5
CO5	Acquire a knowledge of principles of treatment and various therapeutic measures related to Shalakyatantra, according to Samhitas and contemporary medical science.	PO2,PO3,PO4,PO7
CO6	Perform appropriate therapeutic measures related to Shalakyatantra and seek or refer for expert opinion whenever needed.	PO4,PO7
CO7	Communicate effectively with the patient, relatives and other stakeholders.	PO7,PO8
CO8	Demonstrate ethics (Sadvritta), compassion (Karuna) and possess qualities of a clinician (Vaidyaguna).	PO6,PO7,PO9

Table 2 : Contents of Course

Paper 1 (Netraroga (Ophthalmology))						
Sr. No	**A2 List of Topics**	**B2 Term**	**C2 Marks**	**D2 Lecture hours**	**E2 Non-Lecture hours Theory**	**E2 Non-Lecture hours Practical**
1	**Shareera, Nidaana Panchaka of Netraroga.** A) Paribhasha of Shalakya Tantra. B) Netra Rachanashareera (Anatomy of Eye). C) Netra Kriyashareera (Physiology of Eye). D) Samanya Hetu (Nija and Agantuja) of Netraroga. E) Purvarupa of Netraroga. F) Samprapti of Netraroga. G) Saama and Niraama Lakshanas of Netraroga. H) Classification of Netraroga.	1	30	2	2	6
2	**Samanya Chikitsa and Kriyakalpa.** A) Samanya Chikitsa of Netraroga. B) Enumeration of Kriyakalpa. C) Seka. D) Pindi. E) Vidalaka. F) Aschyotana. G) Tarpana H) Putapaka. I) Anjana.	1		3	3	8
3	**Panchakarma and Netraroga.**	1		0	1	0

	Arhata and Importance of Panchakarma in Netraroga Chikitsa.					
4	**Sanjnaharana in Netraroga.** Types and drugs used in Sanjnaharana in Netraroga (Anesthesia in Ophthalmology).	1		0	1	0
5	**Sandhigata Roga -1** A) Applied anatomy of Lacrimal apparatus. B) Pooyalasa, Upanaha (Acute and Chronic Dacryocystitis).	1		3	0	2
6	**Sandhigata Roga -2** A) Netrasrava (Epiphora). B) Hyperlacrimation.	1		1	1	0
7	**Sandhigata Roga -3** A) Krimigranthi (Blepharitis). B) Parvani, Alaji.	1		2	0	0
8	**Vartmagata Roga-1** A) Anjananamika (Hordeolum). B) Utsangini, Lagana (Chalazion). C) Pakshmakopa (Trichiasis, Entropion). D) Pakshmashata. E) Ectropion.	1	34	4	1	6
9	**Vartmagata Roga-2** A) Pothaki (Trachoma). B) Sikatavartma.	2		1	0	0
10	**Vartmagata Roga -3** A) Vatahatavartma (Ptosis). B) Nimesha. C) Klinnavartma.	2		2	0	4

	D) Utklishtavartma.				
11	**Bhedana Karma** Arhata, Purvakarma, Pradhanakarma, Pashchatkarma of Bhedana in Netraroga.	2	0	1	2
12	**Lekhana Karma.** Arhata, Purvakarma, Pradhanakarma, Pashchatkarma of Lekhana in Netraroga.	2	0	1	2
13	**Shuklagata Roga -1** A) Arma (Pterygium). B) Arjuna (Sub-Conjunctival Haemorrhage). C) Shuktika. D) Pishtaka.	2	3	0	6
14	**Shuklagata Roga -2** A) Applied Anatomy of Sclera. B) Sirajala, Sirajapidika (Episcleritis, Scleritis).	2	2	0	2
15	**Chhedana Karma.** Arhata, Purvakarma, Pradhanakarma, Pashchatkarma of Chhedana in Netraroga.	2	0	1	2
16	**Agnikarma and Ksharakarma.** Arhata, Purvakarma, Pradhanakarma, Pashchatkarma of Agnikarma and Ksharakarma in Netraroga.	2	0	1	0
17	**Krishnagata Roga -1** A) Savrana Shukra/Shukla (Corneal Ulcer). B) Avrana Shukra/Shukla (Corneal Opacity). C) Ajakajata (Staphyloma). D) Sirashukla. E) Akshipakatyaya.	2	5	0	4
18	**Krishnagata Roga -2**	2	2	0	4

	A) Uveitis. B) Acute Iridocyclitis.(Tarakamandala-shotha.)					
19	**Dravyas Used In Netrachikitsa-1** Dravyas used in Netrachikitsa [Anti-inflammatory drugs, Immunosuppressive drugs, Anti-infective drugs (Topical- Antibiotics/ Antiviral/ Antifungal agents), Lubricating agents and Artificial tears, Dyes used in Ophthalmology].	2		0	4	0
20	**Eye Donation** A) Basic knowledge of Eye bank. B) Eye Donation. C) Corneal Transplantation.	2		0	4	0
21	**Sarvagata Roga -1** A) Abhishyanda (Conjunctivitis). B) Adhimantha. C) Hatadhimantha.	2	18	4	1	2
22	**Sarvagata Roga -2** A) Shushkakshipaka (Dry Eye Syndrome, Computer Vision Syndrome). B) Sashophapaka. C) Ashophapaka. D) Amloshita. E) Sirotpaata. F) Siraharshha. G) Vaataparyaya. H) Pillaroga.	3		3	1	2
23	**Glaucoma** Dynamics of Aqueous Humour; Classification of Glaucoma and Description of Primary Open Angle	3		1	1	2

	Glaucoma and Primary Angle Closure Glaucoma.					
24	**Drishtigata Roga-1** A) Timira (Errors of Refraction, Presbyopia). B) Amblyopia. C) Kacha. D) Linganasha. E) Kaphaja Linganasha Shastrakarma. F) Pitta-vidagdha Drishti. G) Kapha-vidagdha Drishti. H) Dhumadarshi. I) Ushna-vidagdha Drishti. J) Abhighataja Linganasha. K) Sanimittaja Linganasha. L) Animittaja Linganasha. M) Gambhirika . N) Hraswajadya. O) Nakulandhya.	3	18	7	1	4
25	**Nayanabhighata** A) Nayanabhighata (Ocular trauma and management). B) Agantuja Shalya (Foreign body in eye).	3		1	0	2
26	**Drishtigata Roga-2** Classification of Cataract and description of Senle Cataract (Kaphaja Linganasha).	3		1	1	2
27	**Drishtigata Roga- 3** A) Madhumehajanya Drishtiroga (Diabetic Retinopathy).	3		2	0	0

	B) Jarajanya Pitabindu Upaghata (Age related macular degeneration). C) Drishti-nadi Shosha (Optic atrophy).					
28	**Dravyas used in Netra Chikitsa-2** Mydriatics, Cycloplegic agents.	3		0	1	0
29	**Dravyas used in Netra Chikitsa-3, Swasthavritta, Kuposhanajanya Netravikara (Malnutritional Eye Disorders), Community Ophthalmology.** • A) Dravyas in Netrachikitsa. - Prayoga of Samanya Chakshushya Dravyas. - Prayoga of Samanya Chakshushya Yogas • B) Swasthavritta in Netraroga. - Netra and Chakshu Swasthyahitakara Dinacharya. - Netra and Chakshu Swasthyahitakara Aahara evam Vihara. • C) Kuposhanajanya Netravikara (Malnutritional Eye Disorders) - Naktandhya (Night Blindness). -Jeevanasatwa-kshayajanya Netra roga(Vitamin deficiency Eye disorders). - Xerophthalmia. - Xerosis. • D) Community and Preventive Ophthalmology.	3		1	3	8
Total Marks			**100**	**50**	**30**	**70**

Paper 2 (Shiro-Karna-Nasa-Mukharoga (Oto-rhino-laryngology and Oro-dentistry))						
Sr. No	**A2 List of Topics**	**B2 Term**	**C2 Marks**	**D2 Lecture hours**	**E2 Non-Lecture**	**E2 Non-Lecture**

					hours Theory	hours Practical
30	**Enumeration, Nidana Panchaka and Sadhya-asadhyata of Shiroroga** A) Enumeration, Samanya Nidana, Samprapti, Samanya Lakshanas, Sadhya-asadhyata of Shiroroga. B) Vataja, Pittaja, Kaphaja, Sannipataja Shirahshoola. C) Classification of Headache as per ICHD 3.	1	10	2	1	4
31	**Samanya Chikitsa of Shiroroga** A) Suryavarta, Anantavata, Ardhavabhedaka (Detailed study and differential diagnosis of Migraine headache). B) Shiraso Uttamangatwam, Pathyapathya and Samanya Chikitsa of Shiroroga.	1		0	2	4
32	**Karna Rachana Shareera, Nidana Panchaka and Samanya Chikitsa of Karnaroga** A) Rachana of Karna (Anatomy of Ear) B) Enumeration, Nidana Panchaka, Classification, Sadhya-asadhyata, Pathyapathya, Samanya Chikitsa of Karnaroga.	1	25	2	2	4
33	**Karnaroga 1** A) Karnashoola (Otalgia). B) Karna Shopha.	1		2	0	2
34	**Nasa Shareera, Ghranendriya and Nidana Panchaka of Nasaroga** A) Nasa and Ghranendriya Shareera(Anatomy of Nose & Paranasal sinuses and physiology of Olfaction). B) Enumeration, Samanya Hetu, Samanya Chikitsa, Pathya-apathya, Prognosis of Nasaroga.	1		2	1	2
35	**Pratishyaya**	1		3	1	0

	Pratishyaya, Dushtapratishyaya ,Puyarakta, Nasapaka, Nasashopha.					
36	**Mukha Shareera and Nidana Panchaka of Mukharoga** A) Paribhasha of Mukha. B) Mukha-Shareera. C) Nidana Panchaka,(Common etiological, pathological factors of diseases of Oral cavity as per Contemporary Medical Science); Enumeration, Classification, Sadhya-asadhyata, Pathya-apathya and Samanya Chikitsa of Mukharoga.	1		1	1	4
37	**Oshtharoga** A) Oshtharoga - Vataja, Pittaja, Kaphaja Oshtha Prakopa (Cheilitis, Herpes labialis). B) Khandoushtha (Cleft lip). C) Jalarbuda (Lip Mucocele).	1	10	1	0	0
38	**Sarvasara Mukharoga** Sarvasara Mukharoga (Stomatitis, Oral Submucous Fibrosis, Oral Candidiasis, Tumours of Oral cavity).	1		2	0	0
39	**National Oral Health Programme** National Oral Health Programme including prevention of malignancy of Oral cavity, Dantaraksha Vidhi.	1		0	1	0
40	**Kapalagata Roga** Enumeration, Samanya Nidana, Samprapti, Lakshana and Chikitsa of Kapalagata Roga - Arumshika, Darunaka, Indralupta, Khalitya, Palitya.	2	10	1	0	4
41	**Karna Kriya Shareera and Shravanendriya** Kriya Shareera of Karna and Shravanendriya (Physiology of Hearing and Equilibrium)	2		0	1	0
42	**Karna Badhirya, Karna Naada and Kshweda** A) Karna Badhirya (Hearing loss, Otosclerosis). B) National Programme for Prevention & Control	2		3	1	12

	of Deafness. C) Noise pollution. D) Karna Naada and Kshweda (Tinnitus).					
43	**Karna Srava and Putikarna** Karna Srava (Otorrhea). Putikarna (Otitis Media,Mastoiditis).	2	05	4	2	4
44	**Karnakandu, Karnaguthaka, Karnapratinaha, Krumikarna, Karnavidradhi, Karnapaka.** A) Karnakandu, Karnaguthaka (Ear wax), Karnapratinaha. B) Krumikarna (Maggots in Ear), Karnavidradhi, Karnapaka (Otitis Externa), Otomycosis.	2		2	0	4
45	**Rhinitis** Rhinitis.	2		1	2	0
46	**Deeptadi Nasaroga.** Deepta,Putaka, Nasaparishosha, Bhramshathu, Nasanaha, Kshavathu, Peenasa, Apeenasa, Putinasa (Sinusitis).	2		3	1	2
47	**Nasavamsha-kutilatwa (Deviated Nasal Septum).** Nasavamsha-kutilatwa (Deviated Nasal Septum).	2	10	1	1	0
48	**Dantamulagata roga** A) Sheetada, Dantaveshtaka, Paridara, Upakusha (Gingivitis, Periodontitis). B) Adhimaamsa (Impacted wisdom tooth). C) Dantanaadi. D) Dantavidradhi (Apical abscess).	2		2	1	0
49	**Jihvagata Roga** A) Jihvakantaka (Glossitis).	2		1	1	0

	B) Alaasa. C) Ankyloglossia (Tongue tie).					
50	**Krimidantaka and Dantaharsha** A) Krimidantaka (Dental Caries). B) Dantaharsha (Dentin Hypersensitivity).	2		1	1	0
51	**Dravyas used in Karna Nasa Mukha Roga Chikitsa-1** A) Common Pharmacological agents in Oto-Rhino-Laryngology (Antibiotics, Anti-histamines, PPIs, Steroids, Nasal Decongestants). B) Sammohan Dravyas in Karna Nasa Mukha Roga (Anaesthesia in Oto-Rhino-Laryngology).	2		1	0	2
52	**Karnarsha and Karnarbuda** Karnarsha (Aural Polyps). Karnarbuda.	3	10	1	0	0
53	**Karnasandhana** Karnasandhana (Auroplasty)	3		1	1	0
54	**Bhraamara (Vertigo)** Bhraamara (Vertigo- Benign Paroxysmal Positional Vertigo, Meniere's disease, Labyrinthitis).	3		1	1	2
55	**Agantuja Shalya in Karna** Agantuja Shalya in Karna (Foreign Body in Ear).	3	10	0	1	2
56	**Nasarsha** Nidan Panchaka and Chikitsa of Nasarsha (Nasal polyps).	3		1	1	2
57	**Nasagata Raktasrava** Nidana Panchaka and Chikitsa of Nasagata Raktasrava (Epistaxis).	3		1	1	2
58	**Nasarbuda** Nasarbuda (Tumors of nose and paranasal sinuses).	3		1	1	2

59	**Agantuja Shalya in Nasa** Agantuja Shalya in Nasa (Foreign Body In nose).	3	10	1	0	2
60	**Nasa-abhighata, Nasasandhana** Nasa-abhighata (Nasal trauma). Nasasandhana.	3		1	0	2
61	**Talugata Roga** A) Galashundika (Uvulitis) B) Tundikeri C) Kacchapa (Tumours of hard palate) D) Gilayushotha (Tonsillitis) E) Arbuda F)Talushosha G) Talupaaka	3		2	1	0
62	**Kantharoga** A) Rohini B) Kanthashaluka C) Ekavrunda,Vrunda (Pharyngitis) D) Svaraghna (Laryngitis, Ca Larynx) E) Maamsatana F) Vidaari G) Gilayu, Galavidradhi, (Peritonsillar abscess, Para & Retro-pharyngeal abscess) H) Parotitis I) Agantuja Shalya in Kantha (Foreign Body in throat)	3		4	2	6
63	**Dravyas used in Karna Nasa Mukha Roga Chikitsa-2** Samanya Yogas used in Shiro, Karna, Nasa and Mukha Roga.	3		1	1	2

Total Marks	**100**	**50**	**30**	**70**

Table 3 : Learning objectives of Course

Paper 1 (Netraroga (Ophthalmology))										
A3 Course outcome	**B3 Learning Objective (At the end of the session, the students should be able to)**	**C3 Domain/sub**	**D3 MK / DK / NK**	**E3 Level**	**F3 T-L method**	**G3 Assessment**	**H3 Assessment Type**	**I3 Term**	**K3 Integration**	**L3 Type**
Topic 1 Shareera, Nidaana Panchaka of Netraroga. (LH :2 NLHT: 2 NLHP: 6)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO1	Define Paribhasha of Shalakya Tantra.Explain Netra Rachana Shareera (Anatomy of Eye).	CC	MK	KH	L	QZ ,VV-Viva,PUZ,M-POS	F&S	I	V-RS,V-RS	LH
CO1	Explain Kriya Shareera of Netra (Physiology of vision).	CC	MK	KH	D-M,PER,L&PPT ,TPW	CL-PR,COM	F&S	I	V-KS	NLHT1.1
CO1, CO2	Explain Classification of Netraroga according to treatment principles, prognosis, and Doshadhikya and Explain Saama-Nirama Lakshana.	CC	MK	KH	L&GD, DIS	P-POS,QZ , T-OBT,COM	F&S	I	V-RN	NLHT1.2
CO2	Describe Samanya Hetus (Nija and Agantuja), Purvarupa, and Samprapti of Netraroga.	CC	MK	KH	BS,L&PPT	M-CHT,VV-Viva,P-EXAM	F&S	I	-	LH
CO3, CO7	Perform History taking in cases of Netraroga.	CAN	MK	SH	PBL,EDU,PT,TUT,D-BED	Mini-CEX, P-PRF,P-EXAM,P-VIVA	F&S	I	-	NLHP1.1
CO3, CO7	Follow the steps in performing the structural examination of Netra.	PSY-GUD	MK	SH	TUT,PT ,D-BED ,D,CBL	Mini-CEX	F&S	I	-	NLHP1.2

CO3, CO7	Follow the steps in performing the visual acuity assessment for Distant vision, near vision, colour vision, field of vision, and ocular motility.	PSY-GUD	MK	SH	D,RP,PT,PBL	Mini-CEX, PP-Practical,P-PRF	F&S	I	-	NLHP1.3

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 1.1	Discussion on Netra Kriya Shareera in its Applied aspect.	A) The teacher will provide the link of the material needed or the physical material. Ask the Students to study, discuss with peers, review each other's notes and findings to ensure accuracy and comprehensiveness. Ask the student to connect the knowledge gained in previous classes into applicable clinical framework. B)Make small groups, subdivides subject into smaller topics and asks student to make power point presentations in the class. PowerPoint presentations should be assessed on following criteria- content , focus, clarity and coherence, in-depth analysis, grammar and spelling, delivery of the material, audience engagement, handling nerves, effective use of visual aids. OR C) Learning on eye models can be done for better understanding. Ask the students to compile information and conclusion of discussions. Compilations can be assessed on criteria like Content Accuracy, Completeness, Organization, Clarity of language and explanation of technical terms,Consistency, Uniform presentation of citations and references. D) Guidance from faculty of Kriya Shareera can be taken if needed.
NLHT 1.2	Classification and Saama Nirama Lakshana of Netraroga.	A)Make three groups for classification of Netraroga. The presentation on the topic should be prepared and uploaded on a website created for the students or free cross-platform messaging services like Whatsapp or Telegram or Learning platforms like google classroom. They should be also instructed to go through the textbooks and read this topic. They should make posters and present in classroom, try to find Mnemonics to remember

		classifications. B) Make two groups to understand Saama Niraama Lakshanas. Ask the students to go to library and ask for Librarian's help. They should be asked to subdivide subtopics amongst themselves and split time between different activities like searching for articles, reading and taking notes. Ask the Students to have a group discussion on the topic and prepare a compilation. Encourage open sharing by stating that all ideas are welcome without judgment. Encourage participants to expand on each other's suggestions. Emphasize the importance of listening attentively to all contributions. C) Help from Faculty of Roga Nidana can be taken for better understanding of concepts. D) An open book test or quiz can be conducted to assess the students learning.Evaluation of compilation can be done on criteria like Content Accuracy, Completeness, Organization, Clarity of language and explanation of technical terms, Consistency, Uniform presentation of citations and references.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 1.1	History taking in cases of Netraroga.	A) Encourage students to teach each other history taking techniques, which reinforces their learning and builds confidence. Have students shadow experienced clinicians during patient history taking to observe best practices and techniques and facilitate post-shadowing discussions Make Student introduce himself to patients. Ask Student to make patients comfortable. Ask Student to take general history and history related to eye diseases. Make student Understand Ocular diseases with diminution of vision and normal vision. OR B) Utilize advanced simulation technology to create realistic patient scenarios. Engage students with virtual patient software that simulates real-life scenarios, helping them practice history taking and clinical reasoning skills.

		OR C) Recommend apps like geekymedics, wikimeds that offer virtual practice and conduct quizzes on history-taking skills. D) Conduct OSCEs where students rotate through stations to practice history taking and communication skills.The assessor should use checklists to evaluate students' performance in a reliable and consistent way. E) Communication skills can be assessed by Kalamazoo essential elements communication checklist. OR F) Use MINI-CEX As an evaluation method. The format can be downloaded from https://www.ranzcr.com/images/20211015_RO_Mini-CEX_Assessment_Form.pdf. A similar format can be developed.
NLHP 1.2	Structural Examination of Netra.	A) Prepare the students for examination of all Mandalas, Patalas and Sandhis. Explain parts of Mandalas, Patalas and Sandhis. Explain why examination is crucial for diagnosis. B) Conduct live demonstrations with real or simulated patients to model effective case taking. OR Use videos of experienced clinicians. OR C) Use standardised patients (actors trained to simulate real patient cases) to perform a step-by-step demonstration in a controlled environment. Emphasize key points like technique, safety and anatomical landmarks. D) Teach students the importance of building rapport and demonstrating empathy during patient interactions. Use Mini-CEX. for assessment o Observe a Student’s interaction with a patient in a real-world clinical setting o Rate the performance of student using a 9-point scale: 1 through 3 is unsatisfactory, 4 through 6 is satisfactory, 7 through 9 is superior. o The student receives immediate feedback from the expert E) Provide constructive feedback on their performance, highlighting areas of improvement and

		excellence.
NLHP 1.3	Functional examination of Netra.	A) Present a clinical case of diminution of Vision and have students work in groups to gather history, discuss differential diagnosis, and plan management. Encourage the students for Assessment of visual acuity with the help of Snellen's chart, Assessment of colour vision with Ishihara's chart, Pin hole examination and Assessment of near vision, The finger tip method to assess intraocular pressure and Testing of Ocular motility. OR B)Assign roles to students, such as the patient, the primary care provider, and an observer. Rotate roles to ensure each student gets to practice different aspects of management. Give clear instructions and guidelines for the role-play scenarios. C) Break students into small groups for more focused practice and individualised feedback. Highlight the role of active listening. D) Use Mini-CEX for assessment of students o Observe a Student’s interaction with a patient in a real-world clinical setting o Rate the performance in areas like history taking, physical examination, and counselling skills o The student receives immediate feedback regarding performance and suggestions for improvement

Topic 2 Samanya Chikitsa and Kriyakalpa. (LH :3 NLHT: 3 NLHP: 8)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO6	Enumerate Kriyakalpa, Define and Describe types and dose, Indications and contraindications, Poorva, Pradhana and Pashchat Karma, Kala, Ayoga, Samyak yoga and Atiyoga lakshanas of Seka.Define and Detail Indications and contraindications, Poorva, Pradhana and Pashchat Karma of Pindi and Vidalaka.	CC	MK	KH	L&PPT ,L	QZ ,T-OBT	F&S	I	-	LH
CO5	Define, Describe types and dose, Indications and contra indications, Poorva, Pradhana and Pashchat Karma, Kala, Ayoga,	CK	NK	KH	PER,FC ,L&GD	PA,CR-RE D,T-CS,PR	F	I	-	NLHT2.1

	Samyak and Atiyoga lakshanas of Aschyotana.List the key findings of current research on Aschyotana, Seka, Pindi and Vidalaka.					N,O-QZ				
CO6	Demonstrate Seka and Pindi.Take informed consent and counsel patients for Kriyakalpas in a simulated environment.	PSY-MEC	MK	SH	D,D-M,TUT,RP,TBL	P-PRF,DOPS,DOPS,P-EXAM,DOAP	F&S	I	-	NLHP2.1
CO5	Define and Discuss Types and dose, indications and contra indications, Poorva, Pradhana and Pashchat karma, Kala, Ayoga, Samyakyoga and Atiyoga Lakshanas, complications and management of Tarpana and Putapaka.	CC	MK	KH	L&PPT,L	PRN,M-CHT,COM,QZ,VV-Viva	F&S	I	-	LH
CO5	List the key findings of current research on Tarpana and Putapaka.	CK	NK	K	DIS,TBL,LS	CR-RED,M-POS	F	I	-	NLHT2.2
CO6, CO7	Demonstrate Vidalaka and Aschyotana.	PSY-MEC	MK	SH	D-M,TUT,SIM,D,PT	DOPS,P-PRF,DOPS,PP-Practical, Log book	F&S	I	-	NLHP2.2
CO5	Summarise the steps involved in Tarpana and Putapaka.	CC	MK	KH	D-M,SIM,TUT,PT,D	VV-Viva,P-VIVA,O-QZ	F&S	I	-	NLHP2.3
CO5	Define and Explain Types and Dosage, Indications and contraindications, Poorva- Pradhana and Paschat karma, Kala, Heena, Samyaka and Atiyoga lakshanas, Complications of Anjana.Describe Anjana Shalaka.	CC	MK	KH	L&PPT,L	T-CS,M-POS,PRN,VV-Viva,QZ	F&S	I	-	LH
CO5	List the key findings of current research on Anjana.	CK	NK	K	DIS,L&GD,LS	SA,CR-RED	F	I	-	NLHT2.3
CO5,	Summarise the steps involved in Anjana.	CC	MK	KH	ML,SI	VV-Viva,P	F&S	I	-	NLHP2.4

CO6, CO7					M,PT,D	P-Practical, Log book,P -VIVA,O-QZ					

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 2.1	Details of Aschyotana and Researches studies on Aschyotana, Seka, Pindi and Vidalaka.	A) Aschyotana (25 minutes) Teacher will form study groups to discuss and share information regarding Aschyotana. Ask the students to study themselves, discuss with peers, review each other's notes and finally make short notes and record what they have learnt. At the end of session, make students to have group discussions in the class, which will be summed up by the teacher. Utilize pre-class online quizzes or short assignments to gauge students' prior knowledge and preparation for the in-class activities; During class discussions, assessment of engagement can be done by criteria like student participation, level of curiosity, and willingness to ask questions. B) Researches on Aschyotana, Seka, Pindi and Vidalaka.(25 minutes) Ask the students to form four groups and collect relevant research papers and articles, on the topic. Ask them to go to library and ask for Librarian's help.(Pre-class) Make them subdivide subtopics amongst themselves and split time between different activities like searching for articles, reading and taking notes. Ask them to familiarise themselves with tools like EndNote, Zotero, or Mendeley to collect information about primary and secondary sources, such as journal articles,and books. At the end of session, have group discussions in the class, each group 04 minutes; which will be summed up by the teacher. To evaluate the performance, Peer assessment can be done.
NLHT 2.2	Review of Research studies on Tarpana and Putapaka.	A)Teacher will form four study groups to discuss and share information- Two each for Tarpana and Putapaka. Teacher can subdivide subtopics amongst the students and split time between different activities like searching for articles, reading and taking notes. Students will study themselves, discuss with peers, review each other's notes.(Pre-class) OR B)Teacher will ask the students to go to library and ask for Librarian's help, Students can be asked to

		familiarise themselves with tools like EndNote, Zotero, or Mendeley and collect information from primary and secondary sources, such as journal articles, books etc.(Pre-class) C) At the end of session students must be asked to summarize and record what they have learned.They should make posters and present in the class. A time of 10 minutes should be alloted to each group. Evaluation of posters- To evaluate Consider criteria like Overall impression, Blank Spaces, Balance, Relation between text and graphs, Text size, Structure and reading fluency, Contents.
NLHT 2.3	Discussion on Research studies on Anjana.	A) Teacher will form study groups to discuss and share information, Students will study themselves, discuss with peers, review each other's notes.(Pre-class) Students will be asked to go to library and ask Librarian's help, Teacher can subdivide subtopics amongst them and split time between different activities like searching for articles, reading and taking notes. Students will be asked to familiarise themselves with tools like Zotero, to collect information about primary and secondary sources, such as journal articles, books. (30 min. of the class time.) At the end of session, they should summarize what they have learned. Choose randomly two students from each group to present (05- 10 min. each) B) Students should be encouraged to reflect on their own performance and identify areas for improvement. Self-assessment can be done on parameters like:- Team work and collegiality, empathy and openness, ethical awareness, work planning, scientific method of working, structuring, coping with mistakes, and priorities.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 2.1	A) Procedures of Seka and Pindi. B) Method of taking Informed consent from patients.	A) Ask the Students to observe and perform the procedures under supervision. OR B)Teacher may show recorded procedures to give students a realistic view of the process. Pause at key moments to explain important steps. Explain each step thoroughly, including the rationale behind each action. OR

		C) Use anatomical models, diagrams, and 3D animations to illustrate. D) Provide students with procedural checklists to help them remember the steps and ensure nothing is missed. E) Promote teamwork and collaboration among students, encouraging them to learn from each other's experiences.Stress the importance of maintaining professionalism, confidentiality, and empathy towards patients. Evaluation can be done by Direct Observation of Procedural Skills (DOPS) • The trainee receives constructive feedback that focuses on essential skills. • An assessor observes a trainee performing a procedure. • The assessor records their observations on a structured form. • The assessor provides immediate feedback to the trainee. • Proforma for DOPS can be found at https://www.iscp.ac.uk/static/public/DOPSJul2015.pdf. F) Ask the Students to learn to take informed consent for Kriyakalpas by role play. G)Assign roles to students, such as the patient, the primary care provider, a nurse, and an observer. Rotate roles to ensure each student gets to practice different aspects of management.
NLHP 2.2	Demonstration on Vidalaka and Aschyotana.	A) Ask the students to observe and perform the procedures under supervision. B) Teacher may show recorded procedures to give students a realistic view of the process. Pause at key moments to explain important steps. Explain each step thoroughly, including the rationale behind each action. OR C) Use anatomical models, diagrams, and 3D animations to illustrate. D)Provide students with procedural checklists to help them remember the steps and ensure nothing is missed. E) Promote teamwork and collaboration among students, Stress the importance of maintaining professionalism, confidentiality, and empathy towards patients. Ask the students to maintain log book.

		G)Evaluation can be done by Direct Observation of Procedural Skills (DOPS) • The trainee receives constructive feedback that focuses on essential skills. • An assessor observes a trainee performing a procedure. • The assessor records their observations on a structured form. • The assessor provides immediate feedback to the trainee.
NLHP 2.3	Discussion on Tarpana and Putapaka.	A) Divide students into groups of 04-06 students. Ask the students to observe the technique of preparation of Mashapali, administration of Tarpana, preparation of Putapaka Rasa and administration of Putapaka and outcomes. Teacher may show recorded procedures to give students a realistic view of the process. Pause at key moments to explain important steps. Explain each step thoroughly, including the rationale behind each action. OR Use anatomical models, diagrams, and 3D animations to illustrate. B)Provide students with procedural checklists to help them remember the steps and ensure nothing is missed. C) Promote teamwork and collaboration among students, encouraging them to learn from each other's experiences. Stress the importance of maintaining professionalism, confidentiality, and empathy towards patients. D) Conduct online quiz to evaluate students.
NLHP 2.4	Procedure of Anjana.	A) Divide the students into groups of 04-06. Ask the Students to observe the procedures while being conducted in hospital, under supervision. OR

		B)Teacher may show recorded procedures to give students a realistic view of the process. Pause at key moments to explain important steps. Explain each step thoroughly, including the rationale behind each action. OR C)Use anatomical models, diagrams, and 3D animations to illustrate. D) Provide students with procedural checklists to help them remember the steps and ensure nothing is missed. E) Promote teamwork and collaboration among students, encouraging them to learn from each other's experiences.Stress the importance of maintaining professionalism, confidentiality, and empathy towards patients. F) To assess, use online quiz or evaluate the log book.

Topic 3 Panchakarma and Netraroga. (LH :0 NLHT: 1 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Enlist the diseases in which Poorvakarmas of Panchakarma (Snehana / Swedana) and Panchakarmas are indicated and contra-indicated in Netraroga.	CK	NK	K	L&GD, DIS,LS	M-POS	F&S	I	-	NLHT3.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 3.1	Indications and contraindications of Poorvakarma and Vamana, Virechana, Basti, Nasya,Raktamokshana In Netraroga.	A) Teacher will divide the students into 06 groups. Ask the Students to visit the library and collect related references from Samhita and prepare posters on the indications and contraindications of Panchakarma related to Netraroga.(Pre-class) Make students present their work in the classroom (05 minutes to each group). Conduct a brief discussion, (15- 20 min.)encouraging students to come out with their views regarding the logic behind it. Evaluate them on criteria like Communication skills, Teamwork, Critical thinking, Body language, Interpersonal skills.

		B) A constructive feedback with guidelines for improvements can be given. C) Assess the posters on following points- Choosing the right type; Design for clarity and simplicity; and Use of proper and reliable Data-source.

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity

Topic 4 Sanjnaharana in Netraroga. (LH :0 NLHT: 1 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO5	Define Sanjnaharana (Anesthesia).Enlist types and drugs used for Anesthesia in Ophthalmology.Describe dosage, indications, contraindications and untoward effects. (Topical/Surface anaesthesia - Lidocaine, Amethocaine, Proparacaine).	CC	DK	KH	FC	T-OBT,QZ	F&S	I	-	NLHT4.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 4.1	Sanjnaharana in Netra (Anesthesia in Ophthalmology) -	A)The topic is assigned to students using the flipped method. The students will be given a link to a PowerPoint presentation on Sanjnaharana. The presentation on the topic should be prepared and uploaded on a website created for the students or free cross -platform messaging services like Whatsapp or Telegram or blended learning platforms like google Classroom. They should be also instructed to go through the textbooks and read this topic.(Pre-class) They should be given 1 week time before the scheduled Flipped Class Room for this topic.The class can be divided into 3 groups .one group can be given a job of enlisting the types of anaesthesia used in eye and names of the drugs.Second group can be given a topic- dosage and indications of anaesthetic drugs. Third group can be asked to prepare Indications and contraindications of anesthetic drugs. They would present in the class. (10 min. to each group.)

		B)The students will be asked completion type, reason assertion type, and problem-based questions in the form of Quizzes or open book test for assessment.Students will be also encouraged to ask questions to clarify concepts. (20 min.)

Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**

Topic 5 Sandhigata Roga -1 (LH :3 NLHT: 0 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Describe clinical features and management of Pooyalasa.Define and describe types of Dacryocystitis.	CC	MK	KH	PBL,L, L&PPT	P-VIVA,QZ ,T-OBT	F&S	I	-	LH
CO2, CO5	Describe etiology, clinical features, complications and medical management of acute and chronic Dacryocystitis.	CC	DK	KH	L&PPT	T-OBT	F&S	I	-	LH
CO2, CO5	Describe surgical management of Chronic Dacryocystitis - Dacryocystorhinostomy (DCR), Dacryocystectomy (DCT):- (Their indications, contra indications, type of anaesthesia, major surgical steps, post-operative care, complications and their management in brief).	CC	DK	KH	L&PPT ,L	INT, C-VC,QZ ,P-POS,T-OBT	F&S	I	-	LH
CO3	Examine Netra-sandhi.Follow the steps in performing regurgitation test of the lacrimal sac and observe sac syringing.	PSY-GUD	DK	SH	D-BED, D-M,RP ,L_VC, CBL	OSCE,DOPS,P-EXAM, DOPS,CHK	F&S	I	-	NLHP5.1

Non Lecture Hour Theory		
S.No	**Name of Activity**	**Description of Theory Activity**
Non Lecture Hour Practical		

S.No	Name of Practical	Description of Practical Activity
NLHP 5.1	Evaluation of Netra-sandhi and Dacryocystitis.	A) Examine Netra-sandhi.(60 min.) Make students examine all Sandhis in eye. They will check for any Redness, Growth, Deformity or Scarring. Explain why examination is crucial for diagnosis. Conduct live demonstrations with real or simulated patients to model effective case taking. OR Use standardised patients (actors trained to simulate real patient cases) to perform a step-by-step demonstration in a controlled environment. Emphasize key points like technique, safety, anatomical landmarks Teach students the importance of building rapport and demonstrating empathy during patient interactions. B) OSCE stations -Each student should be given the same model or simulated patient for assessment. The assessor should use checklists to evaluate students' performance in a reliable and consistent way. C) Regurgitation test of the lacrimal sac (30 minutes) Make students demonstrate the technique for the regurgitation test of the Lacrimal sac. Emphasize key points like technique, safety, anatomical landmarks. Teach students the importance of building rapport and demonstrating empathy during patient interactions. C)Observation of Lacrimal sac syringing (30 minutes) Make Students observe the technique of Lacrimal sac syringing.They will be provided with a proper step wise checklist so they do not miss any step while observing the procedure. For assessment checklist can be used each step having specific marks.

Topic 6 Sandhigata Roga -2 (LH :1 NLHT: 1 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2	Describe samprapti of Netrasrava and Clinical features of Pooyasrava, Kaphaja Srava, Raktaja Srava and Pittaja Srava.Give an account of Clinical features and Chikitsasutra of Upanaha.	CC	MK	KH	L,L&PPT ,DIS	INT,O-QZ, T-OBT,VV-Viva	F&S	I	-	LH

CO2	Differentiate between Epiphora and Hyperlacrimation.	CC	MK	KH	LS,L&GD,DIS	T-OBT,INT,CL-PR,DEB,VV-Viva	S	I	-	NLHT6.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 6.1	Differential Diagnosis and causes of Epiphora and Hyperlacrimation.	A) Make atleast four study groups to discuss and share information, each for Differential Diagnosis and causes of Epiphora and Hyperlacrimation. Ask Students to study themselves, discuss with peers, review each other's notes and findings to ensure accuracy and comprehensiveness. OR B) Make students to visit library for library session (20 minutes). Divide subtopics amongst the students by making atlest 4 groups and ask them to read relevant literature about the differences between Epiphora and Hyperlacrimation, and have a group discussion, which will be followed by a presentation (30 minutes - 5 min for each presentation and 10 minutes for teacher for briefing.). During class discussions, pay attention to student participation, level of curiosity, and willingness to ask questions to assess their engagement. Presentations should be assessed on following criteria- content , focus, clarity and coherence, in-depth analysis, grammar and spelling, delivery of the material, audience engagement, handling nerves and effective use of visual aids. Last 10 minutes will be devoted for assessment. Ask the students to record all the discussion.

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity

Topic 7 Sandhigata Roga -3 (LH :2 NLHT: 0 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Describe clinical features and management of Krimigranthi.Define and Enumerate types of Blepharitis.	CC	MK	KH	L&PPT	VV-Viva,T-OBT	F&S	I	-	LH
CO2, CO5	Explain etiology, clinical features, complications, and treatment of Ulcerative and Seborrhoeic blepharitis.Describe clinical features and Chikitsasutra of Parvani; and clinical features of Alaji.	CC	DK	KH	L&PPT ,L	T-OBT,QZ	F&S	I	-	LH

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity

Topic 8 Vartmagata Roga-1 (LH :4 NLHT: 1 NLHP: 6)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO2, CO5	Describe clinical features and management of Anjananamika. Describe types of Hordeolum.Describe etiology, clinical features and management of External and Internal Hordeolum.	CC	MK	KH	L&PPT	VV-Viva,T-CS	F&S	I	-	LH
CO2, CO5	Describe clinical features and management of Utsangini and Lagana.Describe the etiology, clinical features, and medical and surgical management of Chalazion.	CC	MK	KH	L&PPT	VV-Viva,T-CS	F&S	I	-	LH
CO2, CO5	Describe clinical features and management of Pakshmakopa.Describe etiology, clinical features, complications and principle of treatment in Trichiasis and Entropion.	CC	DK	KH	L&PPT	T-CS,VV-Viva	F&S	I	-	LH
CO2, CO5	Describe etiology, clinical features, complications and principle of treatment in Ectropion.Describe clinical features and	CC	NK	KH	L&PPT	T-CS,VV-Viva	F&S	I	-	LH

	management of Pakshmashata.									
CO3, CO5	Discuss and Diagnose, Ectropion and Entropion.	CAN	DK	KH	DIS,PBL,TBL	CL-PR,QZ	F	I	-	NLHT8.1
CO3	Examine of Bhru (eyebrow), Pakshma (eye lashes), Pakshmavartmasandhi (lid margin) and Vartma (eye lid).	PSY-MEC	MK	SH	TUT,PBL,L_VC,D-BED	P-EXAM,P-VIVA,OSCE	F&S	I	-	NLHP8.1
CO5	Summarise the steps involved in the incision and curettage (I&C) for treating a Chalazion.	CC	DK	KH	D,CBL,L_VC	CHK,Log book,OSCE	F	I	-	NLHP8.2
CO3, CO4, CO7	Demonstrate assessment of Pakshmakopa (Trichiasis / Entropion) and Ectropion.Demonstrate misdirected eyelash removal by Epilation.	PSY-GUD	DK	SH	D-BED,L_VC,PBL,ML	SP,Mini-CEX,OSCE	F&S	I	-	NLHP8.3

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 8.1	Diagnostic Approaches to Eyelid Malposition: Entropion and Ectropion.	A) Share a link about explanation of subject by free messaging services or Google classroom.(Pre-class). Make four groups to discuus the subject. Encourage students to actively participate in interactive activities and apply their understanding of Entropion and Ectropion. OR B) Present cases of entropion and ectropion. Have students work in pairs or small groups to discuss symptoms and propose treatments, then share insights, focusing on key clinical signs and diagnostic approaches. C) Give 10 minutes to each group to present in the classroom. D) Assess students individually or in small groups using a quiz format, including multiple-choice and short-answer questions on the etiology, signs, symptoms, and management of entropion and ectropion. OR Assess presentation on its clarity of information, logical organization, visual appeal, scientific soundness, and whether key elements are presented clearly and concisely, E) Briefly discuss the answers to reinforce understanding and address misconceptions.

Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 8.1	Examination of Periocular Structures - Bhru (Eyebrow), Pakshma (Eyelash), Pakshmavartmasandhi (Lid Margin), and Vartma (Eyelid).	A) Ask students to carefully inspect these areas/structures for any anomalies that may compromise ocular health, comfort, and vision. B)Integrate clinical scenarios at the patient's bedside/OPD, allowing students to apply learned skills in a real-world context. C) Encourage students to formulate diagnostic hypotheses based on patient history, guiding their physical examination to focus on relevant findings. Emphasize key points like technique, safety, anatomical landmarks. Teach students to carefully observe patient appearance, skin color, swellings, and any other visible abnormalities. Emphasize appropriate hand placement, pressure application, and how to differentiate textures, masses, and tenderness. D) Teach students the importance of building rapport and demonstrating empathy during patient interactions. E) Provide constructive feedback on their performance, highlighting areas of improvement and excellence. F) Students can be assessed with the help of OSCE stations: They should be assessed on competency in communication, history taking, physical examination, clinical reasoning, and knowledge. OSCE stations may include: • Clinical interactions (in-person or virtual) with standardized patients: counseling, examination, history taking • Examination of mannequins and interpretation of findings • Computerized cases • Test Interpretation.
NLHP 8.2	Incision and curettage (I&C) in Chalazion	A) Instruct students to observe and learn the incision and curettage (I&C) procedure for chalazion .

	surgery.	B) Demonstrate surgical instruments and each phase of the procedure, instructing students to note the surgeon's techniques. C)Teach students about post-operative care, including monitoring for complications and managing patient recovery. OR D) Record surgeries (with patient consent) for educational purposes. Reviewing these videos can help students learn and improve. OR E) Provide access to online surgical tutorials, webinars, and interactive platforms for additional learning. F) Students should be asked to make check lists and assess them. Alternatively, they can be asked to complete log books and they can be assesed. OR To assess, use OSCE covering steps of procedures, focusing on evaluating student's understanding of anatomy, surgical techniques, decision-making, patient management, and appropriate response to complications.
NLHP 8.3	Cases of Eyelid Malposition: Pakshmakopa (Trichiasis, Entropion)and Ectropion; Trichiatic cilia removal by Epilation.	A) Guide students to learn lid examination technique accurately and thoroughly, explaining rationale and key anatomical landmarks. Use a structured approach, breaking down complex examinations into smaller, manageable steps while making them aware of the Assessment of Pakshmakopa (Trichiasis/Entropion), and Ectropion. B) Emphasize proper patient positioning, communication skills, and ethical considerations. C) Students should Observe procedures under supervision. D) Select appropriate patients with relevant clinical presentations. OR E) Teacher can share a video clip of these condition and Epilation process and during practical hours may explain step by step through mobile or big screen. F) Demonstrate the procedure of removing misdirected eyelashes. Emphasize the importance of ethical conduct, patient-centered communication, and empathy throughout clinical teaching. G) Use Standardized assessments like Simulated Patients OR MINI-CEX to assess assessment skills objectively. Create realistic patient scenario with properly trained simulated patients. Assess teh

		students on Communication skills, Physical examination skills, History taking, Developing treatment plans.

Topic 9 Vartmagata Roga-2 (LH :1 NLHT: 0 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Describe clinical features and treatment of Pothaki and Sikatavartma.Describe etiology, clinical features and treatment of Trachoma.	CC	NK	KH	L&PPT ,L	VV-Viva,T-CS	F&S	II	-	LH

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity

Topic 10 Vartmagata Roga -3 (LH :2 NLHT: 0 NLHP: 4)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Describe clinical features of Vatahatavartma and Nimesha.Describe etiology, clinical features and principle of treatment of Ptosis.	CC	NK	KH	L,L&PPT	VV-Viva,T-CS	F&S	II	-	LH
CO3, CO4, CO6, CO7	Present an appropriate history in a patient with complaints of Abnormal Eyelid Mobility.	CAP	DK	KH	PBL	Mini-CEX	F&S	II	-	NLHP10.1
CO2, CO5	Describe clinical features and management of Klinnavartma and Utklishtavartma.	CC	NK	KH	L&PPT	VV-Viva,T-CS	F&S	II	-	LH

CO3, CO4, CO6, CO7	Present an appropriate history in a patient with complaints of Vartma-shopha(lid edema).	CAP	DK	KH	CBL,PBL	Mini-CEX	F&S	II	-	NLHP10.2

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 10.1	History Taking and Case Presentation: Assessment of Patients with Abnormal Eyelid Mobility.	A) To maximize exposure within the scheduled time, it is desirable to organize students into small groups to explore various cases of abnormal eyelid mobility through real patient interactions or problem-based (PBL) methods, rather than focusing on a single case. When evaluating and demonstrating the assessment of a patient with abnormal lid mobility, the teacher should ask students to focus on a thorough history, a comprehensive examination, accurate documentation, and precise diagnosis and treatment tailored to the identified cause. Elicit: Gather focused information on eyelid mobility issues, including onset, duration, severity, associated symptoms (drooping, twitching, or difficulty closing/opening), medical history, surgeries, trauma, and contributing medications or conditions. Document: Record the gathered information accurately in the patient’s medical record for diagnostic assessment, continuity of care, and future reference. Present: Clearly explain the patient's history, highlighting key points for diagnosis and management. B)While assessing with the help of MINI-CEX:- • Select a suitable patient. • Actively observe the student's interaction with the patient, noting their performance on the different criteria like history taking, physical examination, and counselling skills. • Discuss the observations with the trainee, highlighting both positive aspects and areas for improvement,

		• Give a constructive feedback giving guidelines for various software and apps to improve skills.
NLHP 10.2	History Taking and Case Presentation: Assessment of Patients with Vartma-shopha(lid edema).	A) To maximize exposure within the scheduled time, it is desirable to organize students into small groups to explore various types of lid edema through real patient interactions or problem-based (PBL) method, rather than focusing on a single case. The teacher should guide students to focus on obtaining a detailed history, performing a comprehensive examination, ensuring accurate documentation, and providing a precise diagnosis and treatment based on the identified cause. Elicit: Gather relevant information through focused questioning, including onset, duration, severity, associated symptoms (pain, redness, itching), medical history, medications, and potential triggers. Document: Record the gathered information accurately in the patient's medical record for diagnostic assessment, continuity of care, and future reference. Present: Clearly present the patient's history, highlighting key points for diagnosis and management. B) Use MINI-CEX as an assessment tool. Identify stregths and weaknesses in students and discuss with them the ways to improve their clinical skills.

Topic 11 Bhedana Karma (LH :0 NLHT: 1 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Discuss Bhedana in Netraroga (Indications, Contraindications, Incision Techniques and Procedures; and to recognize and manage complications).	CC	MK	KH	BS,RP, TBL,L_ VC	QZ ,VV-Viva	F&S	II	-	NLHT11.1
CO5, CO7	Participate in the team for Bhedana Karma in Netraroga.	PSY-PER	MK	SH	L_VC,C BL,D,T UT	Log book,T R,CHK	F	II	-	NLHP11.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 11.1	Discussion on Bhedana in Netraroga.	A) Present a short case of a condition requiring Bhedana (incision) in Netraroga. Ask students to

		brainstorm and discuss indications and contraindications in pairs or groups. (10 minutes) B) Discuss preoperative steps like consent, anaesthesia. Use checklist or flowchart. Have students role-play as surgeons preparing a patient. (10 minutes) C) Demonstrate proper Bhedana technique using simulated skin pads, gel models, or fruits. (10 minutes) D) Cover key postoperative care steps, including wound dressing, pain management, and infection monitoring. (5 minutes) E) Students should be divided into small groups, and let them identify and discuss managing complications of Bhedana. (5 minutes) F) Summarize key points on indications, contraindications, procedure steps, postoperative care, and complications. (5 minutes) G) Review and re-solve the problems they get wrong. It is preferable to provide self-evaluation in a simple form, such as a quiz.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 11.1	Collaborative Observation of Bhedana Karma in Netraroga (Incision and Drainage/ Curettage).	A) Students gain insight into the surgical techniques of Bhedana, aseptic practices, review relevant anatomy, basic steps of the Bhedana procedure (Incision and drainage / curettage), operating room etiquette, and understand a flow from preoperative counseling to discharge. OR B) A teacher may use recorded procedures, pausing to explain key steps and their rationale, or opt for live demonstrations. C) Focus on each step of the Bhedana karma (incision process), noting the surgeon’s techniques for incision, tissue handling, and any instrument use. D) Encourage students to ask questions about the rationale for certain steps, techniques, or instruments, focusing on gaining insight into procedural reasoning. E) Observe and discuss post surgical procedures with peers. F) Assessment can be done by observing 360 degree behaviour of the student. The format can be based upon Feedback form like - https://abpn.org/wp-content/uploads/2024/04/ABPN-360-Degree-

		Evaluation-Feedback-Form.pdf

Topic 12 Lekhana Karma. (LH :0 NLHT: 1 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Discuss Lekhana in Netraroga (Indications, Contraindications, Techniques and Procedures; and recognize and manage complications).	AFT-VAL	MK	KH	L_VC,D ,RP,TB L	QZ ,VV-Viva	F&S	II	-	NLHT12.1
CO5, CO7	Participate in the team for Lekhana Karma in Netraroga.	PSY-PER	MK	SH	D,TUT, L_VC,P BL	CHK,TR,L og book	F	II	-	NLHP12.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 12.1	Procedure of Lekhana in Netraroga.	A) Integrate practical skill-building with theoretical knowledge, ensuring students develop expertise in both the technical and clinical aspects of Lekhana procedures in Netraroga, from preparation to postoperative care and complication management. (10 minutes) B) Begin with a brief case presentation of a condition requiring Lekhana in Netraroga. Have students work in pairs or groups to brainstorm and share insights. Summarize key indications and contraindications for Lekhana. (10 minutes) Discuss Preoperative Preparations like patient consent, site cleaning, and anaesthesia. Use models or peers to simulate aseptic preparation, marking, and positioning. Reinforce steps with a checklist. (10 minutes) C) Demonstrate how to create precise, uniform strokes or cuts for controlled Lekhana, using models like canvas ball (tennis ball). (5 minutes) Discuss Postoperative Care and Enlist complications and encourage groups of 4-6 students to analyze and discuss recognizing and managing potential complications of Lekhana among themselves. (5 minutes). D) Summarize and encourage questions and clarifications. (5 minutes)

Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 12.1	Collaborative Observation of Lekhana Karma in Netraroga.	A teacher may use recorded procedures, pausing to explain key steps and their rationale, or opt for live demonstrations. A)Review the purpose, indications, and expected outcomes of Lekhana Karma. B) Students should observe surgeon’s techniques for making precise incisions, controlled handling of instruments (Yantra or Patra) and note strategies for patient comfort, like anesthesia/pain management, management of complications. C) They should make Focused Observations and take notes and prepare questions for discussion. D) Summarize and share Key Learnings connecting theory with practice, emphasizing precision and care in outcomes. E) Use log book or trainer's report to evaluate the students. OR Ask them to prepare the checklist and assess it on the thoroughness, completeness and comprehension.

Topic 13 Shuklagata Roga -1 (LH :3 NLHT: 0 NLHP: 6)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Describe Etiology, Types, Clinical features, Differentials of Arma(Pterygium).	CC	MK	KH	L,L&PPT	QZ ,T-CS, VV-Viva	F&S	II	-	LH
CO2, CO5	Describe Medical management and Surgical excision of Arma (Pterygium).[Arma Chhedana, Conjunctival limbal autograft or amniotic membrane graft with Its indications, contra-indications, type of anaesthesia, major surgical steps and post-operative care.]	CC	MK	KH	L&PPT	VV-Viva,T-CS	F&S	II	-	LH
CO3, CO4	Examine Shuklamandala (Conjunctiva and Sclera), and learn the techniques, document findings, and understand Clinical relevance.	CAP	MK	KH	D,D-BED	OSCE,P-EXAM,P-VIVA	F&S	II	-	NLHP13.1
CO3,	Present an appropriate history in patients presenting with growth	AFT-	MK	SH	PBL,D-	Mini-CEX	F&S	II	-	NLHP13.2

CO4, CO6, CO7	(Arma/Pterygium or Pinguecula) or lesions (Bitot's spots) in Shuklamandala.	RES			BED,CBL					
CO2, CO5	Describe clinical features and management of Arjuna.Describe etiology, clinical features and management of Sub-Conjunctival Haemorrhage.Describe clinical features and management of Shuktika and Pishtaka.	CC	MK	KH	L&PPT	T-CS,VV-Viva	F&S	II	-	LH
CO3, CO4, CO6, CO7	Present an appropriate history in a patient presenting with a Raktaakshi (Red Eye) - Arjuna (Sub-Conjunctival Haemorrhage).	AFT-RES	MK	SH	CBL,PBL,D-BED	Mini-CEX	F&S	II	-	NLHP13.3

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 13.1	Examination of the Shuklamandala (Conjunctiva and Sclera).	A) Instruct students to examine the Shuklamandala (Conjunctiva and Sclera) through inspection, eyelid eversion, and observation of vascular patterns. B) Use live or simulated patient demonstrations or video clips to emphasize technique, safety, and anatomical landmarks, aiding in the diagnosis of ocular conditions ranging from minor irritations to serious systemic diseases. C) Teach mnemonics like 'SHOR ya SHASTRA' (Shotha, Raktima, Shalya, Srava) to observe redness, edema, discharge, and foreign bodies. D) Introduce learning platforms like Picmonic for better understanding. E) Let them document and present. F) Assess them, provide them insights on importance of precision in clinical diagnosis.

NLHP 13.2	Cases of Arma, Pishtaka, and growths or discolourations on Shuklamandala.	A) To maximize exposure within the scheduled time, it is desirable to organize students into small groups to explore various cases with growth or lesion in Shuklamandala through real patient interactions or problem-based (PBL)method, rather than focusing on a single case. B) Encourage students to ask patients relevant questions to gather a detailed history of growths or lesions in the Shuklamandala (Conjunctiva). C) They should document the patient's medical history and findings, differentiate growth or lesion to support diagnostic evaluation, care continuity, and future consultations. D) They should summarize and present the patient's history and conjunctiva examination findings in a structured and clear manner. E) Students should be assessed on parameters like Interview Skills, Examination, Interpersonal Skills / Professionalism and Case Presentation using Mini-CEX - (Ophthalmic Clinical Evaluation Exercise (OCEX))
NLHP 13.3	Assessment of patients with Raktaakshi (Red Eye), focusing on Arjuna (Sub-Conjunctival Hemorrhage).	A) Using real patient interactions or problem-based/case-based learning (PBL/CBL) methods, outline an approach for examining and evaluating a patient with Raktaakshi (Red Eye) due to Arjuna (Sub-Conjunctival Hemorrhage), focusing on history-taking, examination, documentation, and an effective diagnosis and management plan. B) Allow students to gather appropriate history to come to diagnosis, record the patient's responses which could assist in the evaluation. C) They should summarize the patient's history and conjunctiva findings in a clear, structured manner, focusing on key points for diagnosis and management and present. D) Identify clinical features that may need referral to a neurosurgeon, if necessary. E) Teach students the importance of building rapport and demonstrating empathy during patient interactions. F) Students should be assessed on parameters like Interview Skills, Examination, Interpersonal Skills / Professionalism and Case Presentation using Mini-CEX - (Ophthalmic Clinical Evaluation Exercise (OCEX))
Topic 14 Shuklagata Roga -2 (LH :2 NLHT: 0 NLHP: 2)		

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Describe clinical features and management of Sirajala and Sirajapidika.	CC	MK	KH	L&PPT	VV-Viva,T-CS	F&S	II	-	LH
CO2, CO5	Describe etiology, clinical features and treatment of Episcleritis and Scleritis.	CC	MK	KH	L&PPT	T-CS,VV-Viva	F&S	II	-	LH
CO3, CO4, CO6, CO7	Present an appropriate history in a patient presenting with Raktaakshi (Red Eye) - Sirajala / Sirajapidaka (Episcleritis and Scleritis - Diffuse / Nodular); differentiate nodule at limbus.	AFT-RES	MK	SH	CBL,D-BED	Mini-CEX	F&S	II	-	NLHP14.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 14.1	Assessment of Patients with Raktaakshi (Red Eye) - Episcleritis / Scleritis: Differentiating Diffuse / Nodular Forms.	A) To maximize exposure within the scheduled time, students can be organized into small groups to explore multiple cases of Raktaakshi (Red Eye) caused by Sirajala/Sirajapidaka (Episcleritis and Scleritis - Diffuse/Nodular) in the Shukla mandala through real patient interactions or problem-based/case-based learning (PBL/CBL) methods, rather than focusing on a single case. B) Students should gather detailed information from the patient's medical history, including symptoms, onset and duration, past ocular or medical history, family history, and potential triggers or systemic associations (e.g., autoimmune conditions). Identify and differentiate nodules at the limbus. C) They should record the patient's history and findings in a structured and clear manner, noting the presence of diffuse or nodular forms of episcleritis or scleritis. D) Encourage them to summarize and share key findings with peers or supervisors. E) Provide constructive feedback on their performance, highlighting areas of improvement and excellence. F) Students should be assessed on parameters like Interview Skills, Examination, Interpersonal Skills /

		Professionalism and Case Presentation using Mini-CEX - (Ophthalmic Clinical Evaluation Exercise (OCEX))

Topic 15 Chhedana Karma. (LH :0 NLHT: 1 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Discuss Chhedana in Netraroga (Indications and Contraindications for Excision Techniques and Procedures; and to recognize and manage complications).	CC	MK	KH	D,L_VC ,TBL,SIM,BS	QZ ,VV-Viva	F&S	II	-	NLHT15.1
CO5	Participate in the team for Chhedana in Netraroga.	PSY-PER	MK	SH	CBL,L_VC,D	TR,Log book,CHK	F	II	-	NLHP15.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 15.1	Comprehnsive discussion on Chhedana in Netraroga.	A) Begin with a brief case presentation of a condition requiring Chhedana (excision) in Netraroga. Encourage students to brainstorm and collaborate in pairs or groups to discuss the indications and contraindications for performing the procedure. (10 minutes) B) Discuss the steps for preoperative preparation, can use role-play as surgeons preparing a "patient," using another student or a mannequin. (10 minutes) C) Use simulated skin pads, gel models, fruits (like oranges), or a video of an actual or simulated procedure for demonstration of the procedure. (10 minutes) D) Divide students into small groups and encourage students to think critically about postoperative care, and managing complications of Chhedana. (10 minutes) E) Summarize the session’s key points, covering the indications, contraindications, steps of the procedure, postoperative care, and complications. (5 minutes)

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity

NLHP 15.1	Observation of Chhedana(Excision) in Netraroga.	A) By following a teacher-led patient journey from preoperative counseling to discharge, students gain valuable insights into the surgical techniques of Chhedana (excision), aseptic practices, and procedural reasoning. Teachers can enhance learning through recorded procedures, pausing to explain critical steps and their rationale, or by conducting live demonstrations. B) Prepare students with Background Knowledge and goals of the Chhedana (Excision). Familiarize them with its basic steps. C) They should observe key surgical steps noting techniques for incision, tissue handling, excision, hemostasis, and closure. D) Encourage them to make Mental or Written Notes E) Allow them to ask questions and strengthen comprehension of surgical concepts. F) Assess them through OSCE, Checklists.

Topic 16 Agnikarma and Ksharakarma. (LH :0 NLHT: 1 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO5	Narrate Agnikarma and Ksharakarma in Netraroga (Indications, Contraindications, Techniques and Procedures; and recognize and manage complications).	CC	DK	KH	L_VC,D ,CBL	VV-Viva,QZ ,COM	F&S	II	-	NLHT16.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 16.1	Discussion on Agnikarma and Ksharakarma in Netraroga.	A) Compile, discuss, brainstorm relevance of Agnikarma and Ksharakarma in Netraroga with its Indications and Contra-indications, Poorvakarma, Pradhanakarma, Pashchatkarma, Upadrava and management of Upadrava in brief. (10 minutes) B) The teacher may Use anatomical models, diagrams, and 3D animations to illustrate surgical procedures. OR Show recorded surgical procedures to give students a realistic view of the process. Pause at key moments to explain important steps. Explain each step thoroughly, including the rationale behind each

		action. (20 minutes) Provide students with procedural checklists to help them remember the steps and ensure nothing is missed. C) Provide access to reputable online resources and journals for further reading and research. (10 minutes) D) Use quizzes, written exams, and practical assessments to evaluate students' understanding and skills. (5 minutes)

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity

Topic 17 Krishnagata Roga -1 (LH :5 NLHT: 0 NLHP: 4)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO2, CO5	Enumerate Krishnagata Rogas. Describe clinical features, management & Sadhya-asadhyata of Savrana Shukra (Corneal Ulcer).	CC	MK	KH	L&PPT ,L	T-CS,P-VIVA,QZ	F&S	II	-	LH
CO2, CO5	Classify Corneal Ulcers.Describe etiology, clinical features, management and complications of Bacterial,Viral and Fungal Corneal Ulcers.	CC	MK	KH	L,L&PPT	T-OBT,QZ ,VV-Viva	F&S	II	-	LH
CO2, CO5	Describe etiology, clinical features, types, prognosis and management of Avrana Shukra (Corneal Opacity)..	CC	MK	KH	L,L&PPT	T-OBT,VV-Viva	F&S	II	-	LH
CO2, CO5	Describe Etiology, Clinical features and Treatment of Ajakajata.(Anterior Staphyloma)	CAN	MK	KH	L&PPT	VV-Viva,T-OBT	F&S	II	-	LH
CO2, CO5	Explain clinical features and treatment of Sirashukla and clinical features of Akshipakatyaya.	CC	DK	KH	L&PPT ,L	T-OBT,VV-Viva,QZ	F&S	II	-	LH
CO3,	Present the method of examination of a Sashula	AFT-	MK	SH	SIM,D-	P-EXAM,O	F&S	II	-	NLHP17.1

CO4, CO7	Raktaakshi.(Painful red eye)(Savrana Shukla/Corneal ulcer).	RES			BED,PBL	SCE,Mini-CEX				
CO3, CO7	Summarise the steps involved in the technique of Slit lamp examination.	CC	MK	KH	ML,TUT,D,PBL,SIM	PP-Practical,SP	F&S	II	-	NLHP17.2

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 17.1	Evaluation of Savrana Shukra (Corneal Ulcer).	A)Present a clinical case of Sashula Raktakshi and have students work in groups to gather history, discuss differential diagnoses, and plan management. Have students shadow experienced clinicians during patient history taking to observe best practices and techniques and facilitate post-shadowing discussions. OR B) Utilise advanced simulation technology to create realistic patient scenarios. Engage students with virtual patient software that simulates real-life scenarios, helping them practice history taking and clinical reasoning skills. OR Use standardized patients(actors or fellow students)to role-play patients with Savrana Shukla. C) Break students into small groups for more focused practice and individualised feedback. D) Recommend apps like Geekymedics, wikimeds that offer virtual practice and quizzes on history-taking skills. E) Have students keep reflective journals where they document their experiences, challenges, and learning points from taking patient histories. F) Assess the students with the help of MINI-CEX or OSCE. Mini-CEX.

		◦ Observe Student’s interaction with a patient in a real-world clinical setting. ◦ Rate the performance in areas like history taking, physical examination, and counselling skills.performance is recorded on a 4 point scale where 1 is unacceptable, 2 is below expectation, 3 is met expectations, and 4 is exceeded expectations. ◦ The student receives immediate feedback from the teacher. F) Conduct OSCEs where students rotate through stations to practice history taking and receive immediate feedback. Encourage students to assess their own performance and identify areas for improvement.
NLHP 17.2	Slit lamp examination.	A) Explain why this examination is crucial for diagnosis. Conduct live demonstrations with real or simulated patients to model effective case taking. OR Use videos of experienced clinicians. OR Use standardized patients (actors trained to simulate real patient cases) to perform a step-by-step demonstration in a controlled environment. B) Introduce different parts of slit lamp, instructions, indications, contra-indications. C) Stress importance of Ensuring patient's comfort, his position, and proper alignment; setting up of Slitlamp ensuring hygiene. D)Ask them to record any findings, such as abnormalities in the cornea, lens, iris, or anterior chamber; any lesions, pigmentation, or signs of disease. E) A simulated patient (SP) can be used as an examination tool by acting as a standardized "patient" with a specific medical scenario, allowing students to demonstrate their clinical skills like history taking, physical examination, communication, and decision-making in a controlled environment, where they can be assessed on their ability to interact with the patient and manage the presented case, providing a consistent and reliable evaluation across different students.

Topic 18 Krishnagata Roga -2 (LH :2 NLHT: 0 NLHP: 4)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO2, CO3, CO4, CO7	Present the case of Uveitis.	AFT-RES	MK	SH	D-BED, PBL,CD	P-CASE,OSCE,SA	F&S	II	-	NLHP18.1
CO2, CO5	Expound Tarakamandala-shotha (Acute Iridocyclitis.)- investigations, differential diagnosis,clinical features,treatment and complications.	CC	MK	KH	L,L&PPT	VV-Viva,QZ ,T-CS	F&S	II	-	LH
CO1, CO2	Recap Applied anatomy of Uvea.Define and narrate (Anatomical and Etiological) classification of Uveitis.	CAP	MK	KH	L&PPT ,L	VV-Viva,T-OBT,M-POS	F&S	II	-	LH
CO3, CO6, CO7	Examine the Taraka (Iris), Drishtimandala (Pupil), and Anterior chamber.	PSY-GUD	MK	KH	PBL,RP ,TUT,D-BED,ML	360D,P-EXAM	F&S	II	-	NLHP18.2

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 18.1	Evaluation of Uveitis.	A)Present different cases of uveitis, discussing the clinical features, differential diagnosis, and treatment options. Encourage students to teach each other history-taking techniques, which reinforces their learning and builds confidence. Have students shadow experienced clinicians during patient history taking to observe best practices

		and techniques and facilitate post-shadowing discussions. OR B) Use standardized patients(actors or fellow students)to role-play patients with uveitis. C) Recommend apps like Geekymedics, Wikimeds that offer virtual practice and quizzes on history-taking skills. D) Have students keep reflective journals where they document their experiences, challenges, and learning points from taking patient histories. F) Discuss indications for referral to a Kayachikitsaka (rheumatologist or infectious disease specialist if systemic causes are suspected). G) Conduct OSCEs where students rotate through stations to practice history taking and receive immediate feedback.Rate the performance in areas like history taking, physical examination, and counselling skills. Performance is recorded on a 4 point scale where 1 is unacceptable, 2 is below expectation, 3 is met expectations, and 4 is exceeded expectations. OR Encourage students to assess their own performance and identify areas for improvement. Self-assessment can be done on following parameters:- Empathy and openness, Ethical awareness, Workplanning, Scientific method of working, Coping with mistakes, and Priorities.
NLHP 18.2	Assessment of Anterior chamber.	A) Divide the students into small groups and direct them to do role play. One student may act as examiner, the other as the patient and ask them to : Assess Drishtimandala (Pupil). Note Findings Record pupil size, shape, and any abnormal reactivity. Assess Taraka (Iris) and note Pathologies. Evaluate Depth Of Anterior Chamber. Evaluate contents of the Anterior chamber. Encourage students to rotate through each station, practicing with the slit lamp and torchlight. OR Provide a link for examination of anterior chamber through Google classroom or free messaging platforms and describe each and every step with necessary pause for detailed explanations while

		students are accessing the link through smart gadgets. B) Demonstrate the use of instruments and explain what to look for at each step. C) Supervisors should verify techniques and provide feedback. D) Teach students how to record findings systematically, including pupil size, iris abnormalities, and anterior chamber status. E) Clarify doubts and review the steps. F) Maintain standards of Safety and Ethics. G) Use 360 degree assessment where the peers, paramedical staff and the assessor assess the students with the help of pre-provided standard checklist.

Topic 19 Dravyas Used In Netrachikitsa-1 (LH :0 NLHT: 4 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO3	Explain the indications, contraindications, dosage and untoward effects of Dyes used in Ophthalmology (Flourescien and Rose bengal stain).	CC	NK	KH	BL,FC	QZ ,VV-Viva,CL-PR	F&S	II	-	NLHT19.1
CO5	Explain the indications, contraindications, dosage and untoward effects of Anti-inflammatory agents (Ketorolac,Flurbiprofen), and Steroids (Dexamethasone and Prednisolone) used in Ophthalmology.	CC	NK	KH	RP,ML,PBL,BL,FC	VV-Viva,QZ	F&S	II	-	NLHT19.2
CO5	Explain the indications, contraindications, dosage and untoward effects of Antibiotics (Bacitracin, Moxifloxacin, Tobramycin, Gentamycin), antifungal agents (Amphoterecin,Natamycin,Fluconazole), and antiviral agents (Trifluridine, Acyclovir).	CC	NK	KH	RP,DIS,LS,ML,PER	PA,VV-Viva,QZ	F&S	II	-	NLHT19.3
CO2, CO5	Explain the indications, contra indications, dosage and untoward effects of lubricating agents and artificial tears (CMC,HPMC, Carbomers, Poly-vinyl Alcohol and Acetylcysteine).	CC	DK	KH	FC	P-EXAM,CL-PR,QZ	F&S	II	-	NLHT19.4

Non Lecture Hour Theory		
S.No	**Name of Activity**	**Description of Theory Activity**
NLHT 19.1	Comprehension on uses of Dyes in Ophthalmology.	A) The topic may be assigned using the flipped method. The presentation on the topic should be prepared and uploaded on a website created for the students or free cross -platform messaging services like Whatsapp or Telegram. The students will be given a link to a PowerPoint presentation. They should be also instructed to go through the textbooks and read this topic. Sub-divide them into four groups:- one each for indications and contraindications for Fluorescein, dosage and untoward effects of Fluorescein ; and Indications and contraindications for Bengal stain, dosage and untoward effects of Bengal stain. They should be given 1 week time before the scheduled Flipped Class room for this topic. After 1 week of self-learning, problem-based questions related to the topics may be asked and discussed with the students. Students will be also encouraged to ask questions to clarify concepts. Each group will be given 12 min. to present. PowerPoint presentations (Each group 10 minutes)should be assessed on following criteria- content , focus, clarity and coherence, in-depth analysis, grammar and spelling, delivery of the material, audience engagement, handling nerves, effective use of visual aids.
NLHT 19.2	Discussion on Anti inflammatory agents and steroids used in ophthalmology.	The students will be explained role of anti-inflammatory agents and steroids essential in Netra Chikitsa ,and the risks involved by a link provided or a physical literature provided a week before. A) Problem-Based Learning Present real-life clinical scenarios and discuss them in groups: Example 1: A patient with anterior uveitis—which drug to prescribe; dosage, and precautions? (10 min) Example 2: A glaucoma patient with conjunctivitis—should steroids be used? Why or why not?(10 min) Groups present findings, followed by class discussion and instructor feedback.(10 min.) OR B) Role-Play Activity- (20 min.) Students act as doctors explaining drug use to a patient:

		Indication for the prescribed drug. Dosage schedule (e.g., tapering for steroids). Possible side effects and their prevention. Rotate roles to ensure participation. Recap and Reflection. C) Use a quiz or rapid-fire questions to recap key points:(10 min.) Dosage and tapering for steroids. Contraindications for NSAIDs (e.g., corneal ulcers). Side effects like increased IOP or delayed healing. Facilitate a reflective discussion on the importance of proper drug use in Netra Chikitsa.
NLHT 19.3	Comprehension on Antibiotics ,antifungal agents, and antiviral agents used in ophthalmology.	A) Divide the class into groups to encourage teamwork during activities. Share information on topic through link a week before the class by Google classroom or free messaging services like Telegram. B) Group Discussion and Role Play- Assign each group a specific category (antibiotic, antifungal, or antiviral) and a corresponding ocular condition. Groups prepare on: Appropriate drug choices. Dosage forms specific to ophthalmology (e.g., eye drops, ointments, injections). Contraindications in ocular and systemic contexts. Common adverse effects and how to manage them. C) Role Play: Groups present their findings as if explaining to a patient or conducting a team discussion in a hospital setting. D) Each group shares its solution and reasoning, leading to peer feedback and a guided discussion by the instructor. Each group will be given 10-12 min. for disccussion and role play.
NLHT 19.4	Presentation on Lubricating agents and Artificial tears.	A) The topic may be assigned using the flipped method. The presentation on the topic 'Lubricants and artificial tears in Ophthalmology' should be prepared and uploaded on a website created for the students or free cross -platform messaging services like Whatsapp or Telegram or blended learning platforms like Google classroom.

		The students are divided into five groups- one each for each drug and will be given a link to a PowerPoint presentation. They should be also instructed to go through the textbooks and read this topic. They should be given 1 week time before the scheduled Flipped Class Room for this topic. B)After 1 week of self-learning, problem-based questions related to the topics may be asked and discussed with the students. Students will present in class and duration of 10-12 min. is allotted to each group. Students will be also encouraged to ask questions to clarify concepts. PowerPoint presentations should be assessed on following criteria- content , focus, clarity and coherence, in-depth analysis, grammar and spelling, delivery of the material, audience engagement, handling nerves, effective use of visual aids. C) Constructive feedback should be given in the form of summary and take home message.(05-10 min.)
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
Topic 20 Eye Donation (LH :0 NLHT: 4 NLHP: 0)		

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO5	Describe organizational structure, purpose and need of growth of Eye Banks.	CC	DK	KH	RLE,FV ,ML,L& GD	VV-Viva,C L-PR,QZ ,INT,M-POS	F&S	II	-	NLHT20.1
CO5	Explain the Objectives, Awareness & Significance of Eye donation.	CC	NK	KH	L&GD, BS	VV-Viva,M-POS,CL-PR	F&S	II	-	NLHT20.2
CO5	Enlist types; describe indications, techniques, risks and complications of corneal transplantation.	CC	NK	KH	DIS,L& PPT ,L_VC	QZ ,M-POS ,VV-Viva	F&S	II	-	NLHT20.3

CO2, CO5	Explain National Programme for Control of Blindness.	CC	DK	KH	FC,PER	QZ ,CL-PR ,PRN,M-POS	F&S	II	-	NLHT20.4

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 20.1	Eye banking- its organization, relevance and purpose.	A) Give a brief introduction of Eye banking ,explaining its relevance and purpose. B) Divide the students into six groups. Each group could focus on a specific aspect of eye banking, such as its services, benefits, technology, legal considerations, ethical implications, or case studies. C) Allow each group to either visit an actual eye Bank or view videos that demonstrate the setup, operation, and impact of an Eye Bank. After the visit or video session, each group should gather detailed information based on their focus area. They can conduct research, discuss among themselves, and prepare to present their findings. D) Host a group discussion in the classroom where each team presents findings. Encourage students to compare and contrast different aspects of eye banking and address any questions or insights that arise. Each group will be given 06-08 minutes each to present. E) Conclude the session (15 min.) by summarizing the key takeaways, and if applicable, encourage students to reflect on how eye banking might evolve in the future. You could also have a Q&A session or brief evaluations of the visit or video experience. F) Group Discussion should be assessed on - Communication skills, Teamwork, Critical thinking, Body language, Interpersonal skills.
NLHT 20.2	Discussion on Eye donation.	A) Clearly present the scenario of Eye donation that the group will brainstorm around. OR Host a group discussion in the classroom where each team presents their aspects of eye donation, and address any questions or insights that arise. B) Encourage open sharing by stating that all ideas are welcome without judgment. Encourage participants to expand on each other's suggestions. Emphasize the importance of listening attentively to all contributions.

		C) Divide students into groups of 5-8 for optimal interaction and participation. Consider assigning roles like facilitator (to guide discussion), timekeeper (to manage time), and notetaker (to record key points). Clearly introduce the topic, providing necessary background information and key questions to guide the discussion. Encourage all students to contribute their thoughts, opinions, and evidence-based reasoning, ensuring everyone has a chance to speak. Ask probing questions to challenge assumptions, evaluate different perspectives, and encourage students to justify their reasoning. Emphasize the importance of listening attentively to others' viewpoints and building on ideas respectfully. C) Give 08-10 minutes for each group to discuss about Objectives, Awareness and Significance of Eye donation. Evaluate them on Communication skills, Teamwork, Critical thinking, Body language, Interpersonal skills. D) Ask students to make posters. Judge the posters on clarity of information, logical organization, visual appeal, scientific soundness, and whether key elements like Objectives, Awareness and Significance of Eye donation are presented clearly and concisely, while also considering the visual design and readability from a distance.
NLHT 20.3	Discussion on Keratoplasty.	A) Begin with a brief case presentation of a condition requiring corneal transplantation. Encourage students to brainstorm and collaborate in pairs or groups to discuss:- (10 min.) Clinical indications for corneal transplantation. Types of corneal transplantation. Correlation of indications with the appropriate transplantation techniques. Risks and complications involved. B) Show recorded surgical procedures (40 min.)to give students a realistic view of the process. Pause at key moments to explain important steps. Explain each step thoroughly, including the rationale behind each action; emphasizing the importance of patient selection, proper surgical technique, and managing potential complications like rejection and infection. C) Use quizzes, Making of Posters to evaluate students’ understanding and skills. Assess its clarity of information, logical organization, visual appeal, scientific soundness, and whether key elements are presented clearly and concisely, while also considering the visual design and readability from a distance.

NLHT 20.4	Objectives, Organizational structure and New initiatives under National programme for Control of Blindness and Visual Impairment.	Use Flipped Classroom method: A) Pre-Class Preparation- Share a concise video (10 minutes) covering the NPCB, its objectives, strategies, and key statistics. Include a short article or infographic for reference through Google Classroom or Whatsapp or telegram. (Pre-class). Ask students to watch the video and read the materials. Provide a quick online quiz (5 minutes) to ensure they understand the basics. B) In-Class Activities (45 minutes) 1. Interactive Discussion (15 minutes)-Start with a quick discussion based on the pre-class materials. Ask students to share key points they found interesting or any questions they have. 2. Case Studies (15 minutes)- Present a brief case study of a community affected by blindness. Have students work in pairs to discuss and propose strategies based on NPCB initiatives. 3. Role-Playing (10 minutes)- Organize a role-playing activity where students act out scenarios involving healthcare providers and patients. Focus on communication and community engagement strategies. C) Post-Class Follow-Up (15 minutes) 1. Reflection (5 minutes)- Ask students to write a short reflection on what they learned and how they can apply it in their future practice. 2. Group Presentation (10 minutes)- Have students present their case study strategies to the class. Assess their understanding and provide feedback. D) Assessment Methods- 1. Pre-Class Quiz- Evaluate students' understanding of the basic concepts before the class. 2. In-Class Participation- Assess students based on their engagement and contributions during discussions and activities. 3. Group Presentation: Evaluate the quality and depth of their proposed strategies.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
Topic 21 Sarvagata Roga -1 (LH :4 NLHT: 1 NLHP: 2)		

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Enumerate Sarvagata Rogas; Describe Lakshana, Chikitsa and Complications of different types of Abhishyanda.	CC	MK	KH	L,L&PPT	QZ ,VV-Viva,T-OBT, T-CS,M-POS	F&S	II	-	LH
CO2	Give Etiological and Clinical Classification, Clinical features (Bacterial, Viral &Allergic) and differential Diagnosis of Conjunctivitis.	CC	MK	KH	L,L&PPT	T-CS,T-OBT,VV-Viva	F&S	II	-	LH
CO2, CO5	Describe Management and complications of Conjunctivitis.	CC	MK	KH	PBL,LS,FC,BL	CL-PR,T-OBT,QZ	F&S	II	-	NLHT21.1
CO2, CO5	Explain Hetu, Lakshana, Chikitsa and Upadrava of different types of Adhimantha and Hatadhimantha.	CC	MK	KH	L&PPT	T-OBT,VV-Viva,QZ ,T-CS	F&S	II	-	LH
CO3, CO4, CO7, CO8	Present a case of Raktaakshi (red eye) presenting with Srava (discharge).	AFT-RES	MK	SH	D,PBL, TUT,RP	P-PRF,Mini-CEX,P-VIVA,OSCE	F&S	II	-	NLHP21.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 21.1	Management of Conjunctivitis.	A) Divide the students into five groups, each assigned a different aspect of Conjunctivitis. Provide a link/ power point presentation/ document with brief overview of Conjunctivitis, explaining the causes, types (viral, bacterial, allergic), symptoms, general management principles, Hygiene measures, and complications. Encourage them to use textbooks, reputable websites, and journal articles. B) Group Assignment: Group 1: Viral Conjunctivitis

		Group 2: Bacterial Conjunctivitis Group 3: Allergic Conjunctivitis Group 4: General Management and Prevention Group 5: Complications of Conjunctivitis C) Each group should create a PowerPoint presentation (10 min.) summarizing their findings. D) After the presentations, facilitate a classroom discussion. Ask questions to encourage critical thinking. Address the role of healthcare providers in preventing spread, particularly in school and daycare settings. Review patient follow-up protocols and when to refer to a specialist E) Conclude by summarizing the key points from each group's presentation. Provide feedback on the students' understanding of the topic. Assess each group's presentation and ability to discuss and answer questions. OR use pre and post quiz method to assess.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 21.1	Evaluation of Raktaakshi (Red eye) with Srava (Discharge).	A)Present a clinical case of Conjunctivitis and have students work in groups to gather history, discuss differential diagnoses, and plan management. OR Assign roles to students, such as the patient, the primary care provider, a nurse, and an observer. Encourage students to teach each other history-taking techniques, which reinforces their learning and builds confidence. OR B) Have students shadow experienced clinicians during patient history taking to observe best practices and techniques and facilitate post-shadowing discussions. Examine Conjunctiva and Cornea thoroughly. C) Document the detailed history (symptom onset, type of discharge, associated symptoms). Record physical examination findings (conjunctival reaction, corneal status, lymphadenopathy,

		anterior chamber clarity). D) One group will present the patient’s history, examination findings, and differential diagnosis to the class. The instructor and peers will discuss possible diagnoses (bacterial vs viral vs allergic conjunctivitis, for example), and the rationale behind them. Discuss management options and treatment approaches based on the clinical findings. Allow time for students to ask questions or clarify doubts. E) Recap of the key learning points from the session. Encourage students to continue practicing the systematic approach to examining red eye conditions. F) Use MINI-CEX or OSCE to evaluate students. • OSCE stations to have signs of local examination, psychomotor skills, communication skills and history taking of a particular examination. Each student is exposed to the same stations and assessment. The assessor should use checklists to evaluate students' performance in a reliable and consistent way. • Communication skills to be assessed by Kalamazoo essential elements communication checklist.

Topic 22 Sarvagata Roga -2 (LH :3 NLHT: 1 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO2, CO5	Describe Lakshanas and Chikitsa of Shushkaskhipaka.Explain Structure of Tear Film: Etiology, Clinical Features, and Management of Dry Eye Syndrome and Computer vision	CC	MK	KH	L,L&PPT	T-OBT,T-CS,VV-Viva,QZ	F&S	III	-	LH

	syndrome.									
CO2, CO5	Construe Lakshanas and Chikitsa of Sashophapaka, Ashophapaka, Amloshita, Sirotpata, Siraharsha, and Vataparyaya.	CC	DK	KH	L,L&PPT	QZ ,T-OBT ,T-CS,PUZ, VV-Viva	F&S	III	-	LH
CO2, CO5	Enlist the diseases mentioned in Pillaroga, And describe Nidana and Chikitsa of Pillaroga.	CC	NK	KH	PL,DIS, BL,TBL ,TPW	VV-Viva,CL-PR,QZ	F&S	III	-	NLHT22.1
CO3, CO4, CO7, CO8	Present a case presenting with Shushkakshi (dry eyes).	AFT-RES	MK	SH	SIM,TUT,ML,PBL,CD	OSCE,Mini-CEX,P-EXAM,P-VIVA,P-CASE	F&S	III	-	NLHP22.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 22.1	Nidana and Chikitsa of Pillaroga.	A) Split the class into 03 groups, ensuring each group has an equal number of students. Assign a group leader for each group to help coordinate the work. Each group will focus on a specific aspect of Pillaroga. Below are some potential topics each group can research: Group 1: Definition and enumeration of Pillarogas (understanding what makes a disease, a Pillaroga). Group 2: Symptoms and causes of different Pillarogas. Group 3: Treatment methods for Pillarogas. C) Ask each group to visit the library and refer to various texts, including classical medical texts, contemporary studies, and academic journals.(pre class: 30 min.) Each group should take detailed notes on their assigned topic and focus on finding credible sources. D) Let them organize their findings into a presentation format (like PowerPoint slides, a report, or posters). Ensure each member of the group understands the topic thoroughly and can contribute to the group discussion.

		E) Arrange a class-wide group discussion, where each group presents their findings to the rest of the class. Group 1: 05 min. Group 2: 05 min. Group 3: 15 min. F) After each presentation, allow time for questions and feedback from other groups. After all presentations, facilitate an open discussion, encouraging students to explore how the information from different groups overlaps and what new insights they have gained. Emphasize the importance of listening attentively to others' viewpoints and building on ideas respectfully. (25 min.) Teacher may share his real-life experiences. Judge them on Communication skills, Teamwork, Critical thinking, Body language, Interpersonal skills. or Take a quiz.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 22.1	Evaluation of Shushkakshi (Dry eye evaluation).	A)Present a clinical case of Shushkakshi and have students work in groups to gather history, discuss differential diagnoses, and plan management. Encourage students to teach each other history-taking techniques, which reinforces their learning and builds confidence. Have students shadow experienced clinicians during patient history taking to observe best practices and techniques and facilitate post-shadowing discussions. Perform the Schirmer test to measure tear production . Conduct the tear breakup time (TBUT) test. Use ocular surface staining with dyes like fluorescein. OR B) Utilize advanced simulation technology to create realistic patient scenarios. Engage students with virtual patient software that simulates real-life scenarios, helping them practice history taking and clinical reasoning skills. C) Break students into small groups for more focused practice and individualized feedback.

		D) Recommend apps like Geekymedics, wikimeds, etc that offer virtual practice and quizzes on history-taking skills. E) Have students keep reflective journals where they document their experiences, challenges, and learning points from taking patient histories. F) Conduct MINI-CEX or OSCEs where students rotate through stations to practice history taking and receive immediate feedback. ◦ Observe a Student's interaction with a patient in a real-world clinical setting. ◦ Rate the performance in areas like history taking, physical examination, and counselling skills. Performance is recorded on a 4 point scale where 1 is unacceptable, 2 is below expectation, 3 is met expectations, and 4 is exceeded expectations. ◦ The student receives immediate feedback from the teacher. Encourage students to assess their own performance and identify areas for improvement. G) Distribute patient questionnaires to gather more detailed information on symptoms and environmental factors affecting eye moisture.

Topic 23 Glaucoma (LH :1 NLHT: 1 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO2, CO5	Define Glaucoma.Explain Clinical & etiological Classification, Clinical Features,Investigative procedures and Complications of Glaucoma (Primary Open Angle Glaucoma,Primary Angle Closure Glaucoma); and various Medical Regimes for Management of Glaucoma. [Topical Beta Blockers, Carbonic Anhydrase inhibitors, Prostaglandin analogues, Adrenergic Drugs Miotics (Pilocarpine)].	CC	MK	KH	L&PPT ,L	T-CS,VV-Viva,QZ ,T-OBT	F&S	III	-	LH
CO5	Describe fundamentals of surgical techniques for Management of	CC	NK	KH	BL,L_V	QZ ,M-	F&S	III	-	NLHT23.1

	Glaucoma (Peripheral Iridectomy, Trabeculectomy, and cyclodestructive procedures).				C,ML	POS,CHK				
CO3, CO7	Summarize the steps involved in the technique of Tonometry and Perimetry.	CC	MK	KH	D-BED, PBL,TUT,D-M	QZ ,P-EXAM,SP	F&S	III	-	NLHP23.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 23.1	Surgical Procedures for Glaucoma.	A) Introduce students to the surgical techniques used in the management of Glaucoma, namely, peripheral iridectomy, trabeculectomy, and cyclodestructive procedures, and to understand the complications associated with glaucoma surgery. Introduce the students to various Surgical instruments; Post-operative monitoring tools. B)Show recorded surgical procedures to give students a realistic view of the process. (45 min.)Pause at key moments to explain important steps. Explain each step thoroughly, including the rationale behind each action. Provide students with procedural checklists to help them remember the steps and ensure nothing is missed. C) Summarize key concepts, and complications.(05 min.) D) Allow students to ask questions and clarify doubts regarding the procedures and their indications.(10 min.) E) Reinforce the importance of sterile techniques during all procedures to minimize infection risk. F) Encourage students to think critically about when each surgical technique is appropriate based on the glaucoma type and severity. G) By the end of the activity, students should have a solid understanding of the different surgical methods used to manage glaucoma, their indications, potential complications, and the post-operative care required to ensure successful outcomes. H) Use quizzes, written exams, and poster making to evaluate students' understanding and skills. Assess poster by its clarity of information, logical organization, visual appeal, scientific soundness, relevance, and whether key elements like the pre-operative, operative and post-operative procedures are presented clearly and concisely, while also considering the visual design and readability from a

		distance.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 23.1	Discussion on Tonometry and Perimetry.	A) Divide Students in small groups of 4 to 6. Tonometry Practical:(45 min.) • Introduction: Explain different types of tonometer, the purpose of measuring IOP ,its importance in diagnosing glaucoma. • Demonstrate the procedure. • Perform the digital tonometry on different patients or among themselves • Discussion: Review normal IOP ranges (10-21 mmHg) and their clinical significance. Perimetry Practical:(45 min.) • Introduction: Explain the concept of visual fields and conditions affecting them (e.g., glaucoma, optic neuropathy). • Result Interpretation: Teach students how to analyze printouts (e.g., blind spots, scotomas). • Key Points to Emphasize- Importance of patient cooperation and fixation; Proper alignment of instruments for accurate readings; Identification of normal vs. abnormal findings in both tests. B) Summarize findings and their clinical implications. Answer student queries and clarify doubts.Encourage students to reflect on challenges faced during the practical.(10 min.) C) Evaluate the students by conducting quiz or demonstrating on model as a simulated patient focusing on student's understanding of anatomy, techniques, decision-making, and appropriate response to complications.

Topic 24 Drishtigata Roga-1 (LH :7 NLHT: 1 NLHP: 4)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO2, CO5	Describe in brief Drishti Vichara as per Susruta Samhita.Expound the clinical features of Patalagata Timira.	CC	MK	KH	L&PPT ,L	VV-Viva,QZ ,PUZ	F&S	III	-	LH
CO2, CO5	Elaborate clinical features and management of Doshaja Timira.	CC	MK	KH	L,L&PPT	T-OBT,VV-Viva	F&S	III	-	LH
CO2, CO5	Explain Clinical features and Treatment of Kacha and Linganasha.	CC	MK	KH	L&PPT ,L	T-OBT,M-POS,CL-PR	F&S	III	-	LH
CO5	Narrate Kaphaja Linganasha Shastrakarma- Poorva , Pradhana, Pashchat karma; Vedhana Shalaka; Upadravas.	CC	MK	KH	L&PPT ,FC,DIS	CL-PR,QZ	F&S	III	-	NLHT24.1
CO2, CO5	Define and expound etiological and clinical classification, clinical features, complications and treatment of errors of refraction - (Myopia, Hypermetropia, Astigmatism).	CC	MK	KH	L&PPT ,L	VV-Viva,T-OBT	F&S	III	-	LH
CO2, CO5	Define, Describe etiology, clinical features and treatment of Presbyopia and Amblyopia.	CC	DK	KH	L,L&PPT	T-OBT,QZ ,VV-Viva	F&S	III	-	LH
CO2, CO5	Detail Clinical features and Treatment of Pitta-vidagdha Drishti, Kapha-vidagdha Drishti, Dhumadarshi and Ushna-vidhagdha Drishti.	CC	DK	KH	L,L&PPT	T-OBT,VV-Viva	F&S	III	-	LH
CO2, CO5	Describe the clinical features of Abhighataja Linganasha, Sanimittaja Linganasha, Animitta Linganasha, Gambhirika and Hraswajadya.Explain the clinical features and treatment of Nakulandhya.	CC	DK	KH	L,L&PPT	QZ ,VV-Viva,T-OBT	F&S	III	-	LH
CO3,	Demonstrate the technique of Fundus examination.	PSY-	MK	SH	ML,D,P	QZ ,SA	F&S	III	-	NLHP24.1

CO7		GUD			T,PBL, D-BED					
CO3, CO4, CO6, CO7	Present an appropriate history in a patient with Timira (Dimness of vision).	AFT-RES	MK	SH	PBL,CD ,RP,D,S IM	P-EXAM,O SCE,P-VIVA	F&S	III	-	NLHP24.2

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 24.1	Kaphaja Linganasha Shastrakarma.	A)The teacher will form five study groups to discuss and share information, each for Purva, Pradhana, Pashchat karma; Vedhana Shalaka and Upadravas of Kaphaja Linganasha. Teacher will instruct students to study themselves, discuss with peers, review each other's notes and findings to ensure accuracy and comprehensiveness. The topics should be presented by power point presentations. Each group should be given a time of 05-08 minutes. OR A)Teachers may use Flipped Classroom technique.The importance as world's first cataract removal technique should be stressed. B) Analyse the students on following criteria- Student participation, Level of curiosity, and Willingness to ask questions; Judge the presentation on following criteria- Content Accuracy, Completeness, Organization, Clarity of language and explanation of technical terms.Provide constructive feedback on their performance, highlighting areas of improvement and excellence. OR B) Utilize pre-class quizzes or short assignments to gauge students' prior knowledge and preparation for the in-class activities; Encourage students to reflect on their learning process and identify areas where they need further support; Review and re-solve the problems they get wrong.

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 24.1	Fundus evaluation (ophthalmoscopy).	A)Students will be demonstrated the parts of the ophthalmoscope and the correct technique for using the ophthalmoscope. Describe and distinguish the fundoscopic features in a normal condition and in abnormal retinal conditions. OR A)They will be shown pictures and videos of normal fundus and abnormal retinal conditions. B) Teach students the importance of building rapport and demonstrating empathy during patient interactions. Provide constructive feedback on their performance, highlighting areas of improvement and excellence. OR C)Recommend apps and online resources that offer virtual practice scenarios. D) It is preferable to provide self-evaluation in a simple form, such as a quiz. OR Self-assessment can be done on following parameters:- Ethical awareness, workplanning, scientific method of working, coping with mistakes.
NLHP 24.2	History taking in a patient with Timira (Dimness of vision).	A) Present a clinical case of Timira (Dimness of vision) and have students work in groups to gather history, discuss differential diagnoses, and plan management. Encourage students to teach each other history-taking techniques, which reinforces their learning and builds confidence. Have students shadow experienced clinicians during patient history taking to observe best practices and techniques and facilitate post-shadowing discussions OR A)Utilise advanced simulation technology to create realistic patient scenarios. Engage students with virtual patient software that simulates real-life scenarios, helping them practice history taking and clinical reasoning skills. OR A)Use standardized patients(actors or fellow students)to role-play patients with Timira (Dimness of

		vision). OR A) Recommend apps like Geekymedics, wikimeds that offer virtual practice and quizzes on history-taking skills. B)Break students into small groups for more focused practice and individualised feedback. C) Have students keep reflective journals where they document their experiences, challenges, and learning points from taking patient histories. OR C)Conduct OSCEs where students rotate through stations to practice history taking and receive immediate feedback. Encourage students to assess their own performance and identify areas for improvement. OSCE stations to have signs of General examination, local examination, psychomotor skills, communication skills and history taking of a particular examination . The assessor should use checklists to evaluate students' performance in a reliable and consistent way. Communication skills to be assessed by Kalamazoo essential elements communication checklist.

Topic 25 Nayanabhighata (LH :1 NLHT: 0 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5, CO6	Describe causes, prognosis, clinical features and treatment of Nayanabhighata.Explain types, clinical features and management of Ocular trauma.Narrate clinical features, methods of removal, and treatment of Agantuja Akshi Shalya (Foreign body in eyes) and when to seek an expert opinion form Netra Shalaki/ Ophthalmologist.	CC	MK	KH	L,L&PPT	C-VC,T-OBT,DEB,QZ ,VV-Viva	F&S	III	-	LH
CO5, CO6, CO7, CO8	Summarize the steps involved in the technique of removal of Agantuja Shalya from the eye.	CC	MK	KH	BS,ML, SIM,D-M,DIS	P-MOD,DOPS,DOPS	F&S	III	-	NLHP25.1

Non Lecture Hour Theory		
S.No	**Name of Activity**	**Description of Theory Activity**
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 25.1	Evaluation of Agantuja Shalya (Foreign body in eyes).	A) Start with a short case presentation of a condition of Agantuja Shalya (Foreign body in eyes). Ask students to brainstorm and to work in pairs or groups to discuss various types of foreign body in eyes. OR A) Demonstrate the correct technique of removal of foreign body from conjunctiva using suitable instruments; or a video of a real or simulated foreign body removal, along with topical anesthetic use. B) Discuss the key steps in Pashchatkarma, such as pain management, and infection monitoring. C) Teacher should educate the students when and how to refer a patient with a foreign body in the eye other than the conjunctiva, to a Netra Shalaki (ophthalmologist). D) Summarize the session's key points. E) Determine the level of understanding by Direct Observation of Procedure Skills or Demonstration on Models: • An assessor observes a trainee performing a procedure. • The assessor records their observations on a structured form. • The assessor provides immediate feedback to the trainee. • The trainee receives constructive feedback that focuses on essential skills.

Topic 26 Drishtigata Roga-2 (LH :1 NLHT: 1 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2,	Define and enlist classification of Cataract.Discuss the etiology,	CC	MK	KH	L&PPT	T-OBT,QZ	F&S	III	-	LH

CO5	clinical features, investigations, and medical management of Senile Cataract.					,VV-Viva				
CO2, CO5	Enlist procedures for surgical management of Senile Cataract.Expound Small Incision Cataract Surgery (SICS) and Phacoemulsification (Their indications, contraindications, type of anesthesia, major surgical steps, post-operative care, complications, and their management in brief).Summarise current research studies on Kaphaja Linganasha/Timira (Cataract).	CC	NK	K	L_VC,DIS,L&GD,ML	OSCE,QZ , VV-Viva,COM	F&S	III	-	NLHT26.1
CO3, CO7	Demonstrate the technique of ocular examination in a patient with Cataract.	AFT-RES	MK	SH	D,D-BED,ML,PBL,CD	P-VIVA,OSCE,360D, PP-Practical	F&S	III	-	NLHP26.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 26.1	Surgical management of Senile Cataract and current research studies on Kaphaja Linganasha/Timira (Cataract).	Surgical Management of Senile Cataract (40 min.) The teacher may- A)Use anatomical models, diagrams, and 3D animations to illustrate surgical procedures. OR A)Show recorded surgical procedures to give students a realistic view of the process. Pause at key moments to explain important steps. Explain each step thoroughly, including the rationale behind each action. Provide students with procedural checklists to help them remember the steps and ensure nothing is missed. OR A) The teacher may use Video Recordings or surgical simulators to provide hands-on practice in a controlled, risk-free environment. B) Encourage students to ask questions and discuss the procedure as it unfolds. Foster a collaborative

		learning environment. The teacher should Include scenarios where complications arise and teach students how to manage these situations. C) Stress the importance of patient safety, aseptic techniques, and surgical hygiene. Discuss ethical issues related to surgery, including informed consent, patient confidentiality, and decision-making. OR A) Provide access to reputable online resources and journals for further reading and research. B) To evaluate, use quizzes, written exams, and practical assessments through OSCE to evaluate students' understanding and skills. Provide constructive feedback on their performance, highlighting areas of improvement and excellence. C) Instruct students to go through various research works published in peer-reviewed journals, compile and present the data followed by a discussion. Assess them on Content , Focus, Clarity and coherence, In-depth analysis, Grammar and spelling,Effective use of visual aids.(15 min.)

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 26.1	Examination of Cataract.	A) Break students into small groups for more focused practice and individualized feedback.Present a clinical case of cataract, including examination of visual acuity and iris shadow. And have students work in groups to gather history, discuss differential diagnoses, and plan management. Encourage students to teach each other history-taking techniques, which reinforces their learning and builds confidence. Have students shadow experienced clinicians during patient history taking to observe best practices

		and techniques and facilitate post-shadowing discussions. OR Use standardized patients(actors or fellow students)to role-play patients with cataract. The student will take informed consent, counsel, examine, and explain surgical steps to a patient /volunteer in a simulated environment.Break students into small groups for more focused practice and individualized feedback. OR Recommend apps like Geekymedics and wikimeds that offer virtual practice and quizzes on history-taking skills. OR Make them a part of surgical team for Cataract. B) Have students keep reflective journals where they document their experiences, challenges, and learning points from taking patient histories. OR Conduct OSCEs where students rotate through stations to practice history taking and receive immediate feedback. Encourage students to assess their own performance and identify areas for improvement. OSCE stations to have signs of General examination, local examination, psychomotor skills, communication skills and history taking of a particular examination. OR The students can be assessed through 360 degree assessment wherein the student himself, the peers, the nursing staff and the assessor do the evaluation with a pre-given standard format.

Topic 27 Drishtigata Roga- 3 (LH :2 NLHT: 0 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Define and describe etiopathology, classification, clinical features, complications, and treatment of Madhumehajanya Drishtiroga (Diabetic Retinopathy).	CC	DK	KH	L&PPT ,L	T-OBT,COM,VV-Viva	F&S	III	-	LH
CO2,	Define, describe etiopathology, clinical features, complications	CC	DK	KH	L&PPT	VV-Viva,T-	F&S	III	-	LH

CO5	and treatment of -Jarajanya Pitabindu Upaghata (Age-related macular degeneration) and Drishti-nadi Shosha (Optic Atrophy).				,L	OBT				
CO2, CO5, CO7	Present a case of Madhumehajanya Drishtiroga (Diabetic Retinopathy).	AFT-RES	MK	KH	ML,PBL,D-BED	VV-Viva,OSCE	F&S	III	-	NLHP27.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 27.1	Case discussion on Madhumehajanya Drishtiroga (Diabetic Retinopathy).	A) Introduction (10 min.) - Briefly introduce the topic and outline the objectives of the practical session. - Explain the importance of understanding diabetic retinopathy for future healthcare professionals. - Provide a concise overview of Madhumehajanya Drishtiroga (Diabetic Retinopathy), including its definition, prevalence, and significance. B) Interactive Lecture (20 minutes) - Explain the pathophysiology of diabetic retinopathy using diagrams and images. - Discuss the stages of diabetic retinopathy and its progression. - Describe common symptoms and diagnostic methods, including fundoscopy and imaging techniques like OCT (Optical Coherence Tomography). C) Hands on activity-(70 min.) - Provide students with access to retinal images. - Guide them through the process of examining retinal images and identifying key features of diabetic retinopathy. - Present real or simulated case studies of patients with diabetic retinopathy. - Encourage students to analyze the cases, identify the stage of retinopathy, and suggest possible treatment options. - Divide students into small groups to discuss the case studies and share their findings.

		- Facilitate a discussion on the challenges and management strategies for diabetic retinopathy. - Encourage them to discuss the relative Arhata-anarhata of Kriyakalpa. D) Assessment and Wrap-Up (10 minutes) - Administer a short quiz to assess students' understanding of the topic. - Review the answers and provide feedback. - Summarize the key takeaways from the session. - Encourage students to continue their learning and stay updated on advancements in diabetic retinopathy.

Topic 28 Dravyas used in Netra Chikitsa-2 (LH :0 NLHT: 1 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO5	Define Mydriatics, Describe Phenylephrine 5% and Tropicamide 0.5%.Define Cycloplegic agents, Explain Atropine 1%, Homatropine 2%, and Cyclopentolate 1%.	CAP	DK	KH	L&GD	CL-PR,VV-Viva	F&S	III	-	NLHT28.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 28.1	Mydriatics and Cycloplegic agents.	A)Teacher will form five study groups to discuss and share information, through link circulated through messaging platforms or google classroom; each for phenylephrine 5% Tropicamide 0.5%, Atropine 1%, Homatropine 2%, Cyclopentolate 1%. Teacher will instruct students to study their dosage, indications, contraindications, untoward effects; discuss with peers, review each other’s notes and findings to ensure accuracy and comprehensiveness. B) Each group will be given a duration of 10 minutes to present in Classroom. During class discussions, pay attention to student participation, level of curiosity, and willingness to ask questions assess their engagement. assess the presentations on content , focus, clarity and coherence, in-depth analysis, grammar and spelling, delivery of the material, audience engagement, handling nerves, effective use of visual aids. At the end of session, summarize what they have learned.

Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**

Topic 29 Dravyas used in Netra Chikitsa-3, Swasthavritta, Kuposhanajanya Netravikara (Malnutritional Eye Disorders), Community Ophthalmology. (LH :1 NLHT: 3 NLHP: 8)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO5, CO6	Identify and describe Guna,Karma and Matra of Samanya Chakshushya Dravyas.	CC	MK	KH	D,DG	P-EXAM,P-ID	F&S	III	-	NLHP29.1
CO5	Observe the communication between physician and patient regarding prescription (Matra, Anupana, Route of administration, Untoward effects) of Samanya Chakshushya Yoga.	CC	DK	KH		Log book	F	III	-	NLHP29.2
CO5	Describe Netra Swasthyahitakara Dinacharya.	CC	MK	KH	DIS,LS, BL	VV-Viva,COM,CL-PR	F&S	III	-	NLHT29.1
CO5	Describe Netra Swasthyahitakara Aahara Evam Vihara.	CC	DK	KH	LS,DIS, PER	CL-PR,VV-Viva,QZ	F&S	III	-	NLHT29.2
CO5	Describe causes, clinical features, prevention and treatment of Naktandhya (Night Blindness); and Jeevanasatwa-Kshayajanya Netraroga (Vitamin deficiency disorders)(Malnutritional Eye disorders)- (Deficiency of Vitamin-A, Vitamin-B1, Vitamin- B2, Vitamin C, Vitamin-D).	CC	DK	KH	FC,DIS	QZ ,VV-Viva,PRN	F&S	III	-	NLHT29.3
CO4, CO7	Present an appropriate history in a patient presenting with Naktandhya (night blindness).	AFT-RES	MK	KH	SIM,RP ,PBL	OSCE,Log book,QZ	F&S	III	-	NLHP29.3
CO2, CO5	Describe the etiology, clinical features, WHO Classification, management and prophylaxis of Xerophthalmia. Describe clinical	CC	NK	KH	L&PPT ,L	VV-Viva,T-OBT	F&S	III	-	LH

	features and management of Xerosis.										

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 29.1	Netra Swasthyahitakara Dinacharya.	A) Teacher forms groups to compile information from classics. These groups can form subgroups to divide chapters from classics. (30 min.) Librarians can collaborate with teacher to incorporate medical informatics into medical education. Librarians can help students evaluate and synthesize information. OR Digital libraries can create a medical informatics program that complements this activity. After this Library session, they should come back to classroom and present information from the library and classroom lecture. (25 min.) Debriefing can help maximize learning by summarizing and clarifying what was learned. B) Provide feedback to help students identify areas for improvement. (05 min.) Impress upon them that presentation and contents are equally important in this topic and evaluate them accordingly. After class, ask these groups to compile the information. Each group will submit separate compilation. C)Evaluation of compilation can be done on criteria like Content Accuracy, Completeness, Organization, Clarity of language and explanation of technical terms, Consistency, Uniform presentation of citations and references.
NLHT 29.2	Netra Swasthyahitakara Aahara Evam Vihara.	A) The teacher will form two study groups to discuss and share information, each for Netra Swasthyahitakara Aahara Evam Vihara. (pre class) Teacher will form sub groups to discuss and share information, each for Various eye exercises like Sunning, Palming, Ball exercise, Bar exercise, candle light reading, pencil push-ups, and figure of eight. (Pre-class)

		Teacher will Instruct the students to study themselves, discuss with peers, review each other’s notes and findings to ensure accuracy and comprehensiveness. Teacher will ask the groups to present information about Aahara in the classroom. (20 min.) Sub groups can be made according to Aahara-varga. And 30 minutes will be given to present Eye exercises. B) Utilize pre-class quizzes or short assignments to gauge students' prior knowledge and preparation for the in-class activities; During class discussions, pay attention to Communication skills, Teamwork, Critical thinking, Body language, Interpersonal skills to assess their engagement; Encourage students to reflect on their learning process and identify areas where they need further support; Review and re-solve the problems they get wrong. C) At the end of session, summarize what they have learned.
NLHT 29.3	Jeevanasatwa-kshayajanya Netraroga (Vitamin deficiency disorders)(Malnutritional Eye disorders).	A) Teacher will form six study groups to discuss and share information, each for Naktandhya (Night Blindness), Jeevanasatwa-kshayajanya Netraroga (Vitamin deficiency disorders)(Malnutritional Eye disorders)- (Deficiency of Vitamin-A, Vitamin-B1, Vitamin- B2, Vitamin C, Vitamin-D) (causes, clinical features, prevention and treatment) Teacher will instruct students to study themselves, discuss with peers, review each other’s notes and findings to ensure accuracy and comprehensiveness.(pre-class) The groups will present in the classroom. (06-08 min. for each group) B)Utilize pre-class quizzes or short assignments to gauge students' prior knowledge and preparation for the in-class activities; During class discussions, pay attention to student participation, level of curiosity, and willingness to ask questions assess their engagement; Encourage students to reflect on their learning process and identify areas where they need further support; Review and re-solve the problems they get wrong. It is preferable to provide self-evaluation in flipped classroom in a simple form, such as a quiz. At the end of session, summarize what they have learned and plan what to do next.(10-15 min.)
Non Lecture Hour Practical		

S.No	Name of Practical	Description of Practical Activity
NLHP 29.1	Use of Samanya Chakshushya Dravyas in Eye diseases..	The drugs to be studied are :- Amalaki, Vibheetaki, Hareetaki, Draksha, Yashtimadhu, Punarnava, Saindhava, Shigru, Lodhra, Nimba, Manjistha, Daruharidra, Gairika. A) Prepare handouts of the pictures of the drugs and handover to students. Teacher will instruct students to learn to identify common chakshushya dravyas by specimens and pictures. OR Use knowledge of Dravyaguna (pharmacology) to provoke pharmacotherapeutic thinking and reasoning. Explain students the indications of these drugs in Netraroga.. OR Ask them to go through various databases like https://bsi.gov.in/page/en/medicinal-plant-database. B) Questionnaires can be used to assess a student's knowledge of drugs. The questionnaire can include questions about the drug's name, dosage, analyzing the drug's active ingredients, side effects, precautions, and more.
NLHP 29.2	Prescription of Samanya Chakshushya Yoga.	A) Students will observe the communication between physician and patient regarding prescription (Dose, anupana, route of administration, anticipation of effects) of Samanya Chakshushya Yogas like - Triphala Ghrita, Jeevantyadi Ghrita, Patoladi Ghrita, Saptamruta Louha, Triphala Guggulu, Chandrodaya Varti, Ilaneer Kuzhampu and Triphala Churna. They will journal these points. B)They are encouraged to ask questions. C) They should be able to identify these drugs. D) Action of these Yogas in diseases described in Shalakyatantra is explained by the teacher. E) Evaluate their log books on clarity, completeness, comprehensive information. OR Students can review each other's logbooks to provide additional feedback and perspective.

NLHP 29.3	Evaluation of Naktandhya (night blindness).	A) Present a clinical case of night blindness and have students work in groups to gather history, discuss differential diagnoses, and plan management. Encourage students to teach each other history-taking techniques, which reinforces their learning and builds confidence. OR Engage students with virtual patient software that simulates real-life scenarios, helping them practice history-taking and clinical reasoning skills. OR Use standardized patients(actors or fellow students) to role-play patients with night blindness Break students into small groups for more focused practice and individualized feedback. OR Recommend apps like Geekymedics, Wikimeds that offer virtual practice and quizzes on history-taking skills. B) Have students keep reflective journals where they document their experiences, challenges, and learning points from taking patient histories. OR Conduct OSCEs where students rotate through stations to practice history taking and receive immediate feedback. Encourage students to assess their own performance and identify areas for improvement. OSCE stations to have signs of General examination, local examination, psychomotor skills, communication skills and history taking of a particular examination . The assessor should use checklists to evaluate students' performance in a reliable and consistent way. Communication skills to be assessed by Kalamazoo essential elements communication checklist.

Paper 2 (Shiro-Karna-Nasa-Mukharoga (Oto-rhino-laryngology and Oro-dentistry))										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**

Course outcome	Learning Objective (At the end of the session, the students should be able to)	Domain/sub	MK / DK / NK	Level	T-L method	Assessment	Assessment Type	Term	Integration	Type
Topic 30 Enumeration, Nidana Panchaka and Sadhya-asadhyata of Shiroroga (LH :2 NLHT: 1 NLHP: 4)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO1, CO2, CO5	Classify Shiroroga according to Sushrutha and Vagbhata.Enlist Sadhya-asadhyatwa of Shiroroga.Explain the Samanya Nidana and Samprapti of Shiroroga.Explain Hetus, Lakshana, Chikitsa of Vataja Shiroroga, Pittaja Shiroroga, Kaphaja Shiroroga and Sannipataja Shiroroga.	CC	MK	KH	L&PPT ,L	QZ ,P-VIVA,T-OBT, M-POS,S-LAQ	F&S	I	-	LH
CO2, CO5, CO7	Present an appropriate history in a patient presenting with Shirahshoola. Learn Differential diagnosis of Shirorogas -Vataja, Pittaja, Kaphaja, Sannipataja, Suryavartha, Anantavata, Ardhavabhedhaka.	AFT-RES	MK	SH	CD,D,TUT,PBL ,RP	P-EXAM,P-VIVA,SA, OSCE	F&S	I	-	NLHP30.1
CO2, CO5	Understand the International Classification of Headache ICHD-3 and discuss Samanya Yogas used in Shiroroga.	CC	DK	KH	LS,L&PPT ,DIS,SY	M-POS,CL-PR	F&S	I	-	NLHT30.1
CO2, CO7	Perform History taking and give outline of case sheet (Shira Karna Nasa Mukha roga).	CAP	MK	SH	BL,RP, D,TUT, PBL	SP	F&S	I	-	NLHP30.2

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 30.1	Poster presentation on ICHD-3 Classification. Compiled presentation on Common Yogas used in Shiroroga.	A) The teacher will form five different study groups to discuss and share information. One group for Classification of ICHD-3 and 04 for Samanya Yogas. Students will study themselves, discuss with peers, and review each other’s notes and findings to ensure accuracy and comprehensiveness.

		They would make a Poster as per ICHD-3. The presentation time will be 10 minutes. Assess on criteria like clarity of information, visual appeal, scientific soundness, and readability from a distance. B) To study Yogas, the students are divided into 04 groups; they can go to the library (Pre-class), ask Librarian's help, they can subdivide subtopics -usage, dosage, and outcomes. Compile the Yogas. • Varunadi Kashaya • Mahalakshmi Vilasa Rasa • Laghusutashekhara Rasa • Varanadi ksheera Ghrita. They can split time between different activities like searching for articles, reading, and taking notes. They should familiarise themselves with tools like Zotero, to collect information about primary and secondary sources, such as journal articles, and books. C) At the end of the session, the teacher should ask them to summarize what they have learned and present in class. Each group is given 05 minutes to present. Judge the compiled presentation on- • Content Accuracy. • Completeness. • Presentation in a logical and coherent structure. • Clarity of language and explanation of technical terms. • Uniform presentation of citations and references.

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 30.1	Evaluation of Shirahshoola.	A) Present a clinical case of Shirorogas (Headaches) -Any Type of Headache (such as Suryavarta,

		Ardhavabhedhaka, Anathavata) and have students work in groups to gather history, discuss differential diagnoses, and plan management. Encourage students to teach each other history-taking techniques, which reinforces their learning and builds confidence. Have students shadow experienced clinicians during patient history taking to observe best practices and techniques and facilitate post-shadowing discussions. Encourage students to present a case in a scientific format. OR Use standardized patients(actors or fellow students)to role-play patients with Shirahshoola. C) Break students into small groups for more focused practice and individualized feedback. D) Recommend apps like Geekymedics, Wikimeds that offer virtual practice and quizzes on history-taking skills. E) Have students keep reflective journals where they document their experiences, challenges, and learning points from taking patient histories. F) Conduct OSCEs where students rotate through stations to practice history taking and receive immediate feedback. G) Encourage students to assess their own performance and identify areas for improvement.
NLHP 30.2	Introduction of case sheet for Shiro Karna Nasa Mukha roga.	A)Get familiar with the Case sheet. Form groups of 5-7 students each. Facilitate discussion amongst themselves regarding the topic and observe. The student tries to connect the knowledge gained in previous classes to applicable clinical framework. The teacher shows the student how to see the case sheet, the way he sees it. The teacher helps to bring things together in the context of Shiro-karna nasa mukha roga. Teacher and student come to a point of new understanding after discussion. B) Explain why case-taking is crucial for diagnosis and treatment planning. Conduct live demonstrations with real or simulated patients to model effective case-taking. C)Use videos of experienced clinicians. D)Provide a structured framework for students to follow during case taking. E) Teach Mnemonics like OLD CARTS (Onset, Location, duration, Character, Aggravating/relieving

		factors, timing, severity) F)Engage students with virtual patient software that simulates real-life scenarios, helping them practice history-taking and clinical reasoning skills. G)Use standardized patients (actors or fellow students)to role-play patients. H)Teach students the importance of building rapport and demonstrating empathy during patient interactions. Highlight the role of active listening. Integrate case-taking with physical examination skills, teaching students correlations between them. I)Use Simulated patients as an evaluation method. • Create realistic patient scenarios with detailed medical histories, presenting complaints, and desired outcomes. • Thoroughly train Simulated Patients to accurately portray patient behaviors, emotions, and physical presentations. • Assess on criteria like Communication skills, Physical examination skills, History taking, and developing treatment plans. • Provide constructive feedback on their performance, highlighting areas of improvement and excellence.

Topic 31 Samanya Chikitsa of Shiroroga (LH :0 NLHT: 2 NLHP: 4)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1	Explain Shiraso Uttamangatwam.	CC	DK	KH	BL,DIS, BS	DEB,CL-PR	F&S	I	-	NLHT31.1
CO5, CO6, CO7	Demonstrate under supervision Moordhni Taila.	PSY-GUD	MK	SH	RP,D,D-M	DOPS,DOPS	F&S	I	-	NLHP31.1
CO2, CO3,	Present an appropriate history in a patient presenting with Ardhavabhedaka.	AFT-RES	MK	SH	CD,RP, PBL,D-	SA,PP-Practical,OSCE	F&S	I	-	NLHP31.2

CO7					BED					
CO3, CO5	Discuss Ardhabhedaka, Anantavata and Suryavarta.	CC	MK	KH	DIS,PER	PP-Practical,INT,CL-PR	F&S	I	-	NLHT31.2

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 31.1	Discussion on Shiraso Uttamangatwam.	A)Teacher will share information through cross-platform messaging services like Signal, WhatsApp etc., or google classroom, a week before. Teacher will form different study groups to discuss and share this information, each for Rachana, Kriya related to Shiras; Nidanatmaka involvement of Shiras in Indriya-vikaras; and Shiras as Chikitsa-marga. B)Students will study themselves, discuss with peers, review each other's notes and findings to ensure accuracy and comprehensiveness. They can Brainstorm their sub-topic Pre-class and come to inferences. They can go to library, ask Librarian's help, they can subdivide subtopics such as Rachana Shareera of Shiras,Marma,Nervous System,etc amongst themselves and split time between different activities like searching for articles, reading and taking notes. C) Each group would be given 10 minute to present in the classroom in the form of Powerpoint presentation and then they can have a debate on the scientific nature, objectivity and applicability of the topic for 10 minutes. At the end of session, summarize and give feedback based on their participation levels, clarity of kowledge, visual appeal and organisation of thoughts.
NLHT 31.2	Etiology, Clinical Features,and Management of Ardhabhedaka, Anantavata and Suryavarta.	A) The teacher will form three study groups to discuss and share information, each for Ardhavabhedaka, Anantavata, and Suryavarta. Students will study themselves, discuss with peers, review each other's notes and findings to ensure accuracy and comprehensiveness. Encourage all students to contribute their thoughts, opinions, and evidence-based reasoning, ensuring

		everyone has a chance to speak. Ask probing questions to challenge assumptions, evaluate different perspectives, and encourage students to justify their reasoning. Emphasize the importance of listening attentively to others' viewpoints and building on ideas respectfully. B) Provide feedback: Assessment of -Communication skills, Teamwork, Critical thinking, Body language, Interpersonal skills. At the end of the session, summarize what they have learned. C) Discuss the similarities and usefulness in current practice.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 31.1	Application of Shirolepa, Shiro-abhyanga, Shiroseka, and Shirobasti.	A)Discuss the patient’s history, diagnosis, and therapy plan in detail before entering the Therapy Hall. Emphasize the importance of hygienic techniques and the steps to maintain a hygienic environment. Ensure students understand the correct use of PPE whenever necessary. Walk students through the Murdhni Taila procedure step-by-step, explaining the purpose and technique of each step. OR Demonstrate on model. Foster an environment where students feel comfortable asking questions and seeking clarification. Teach students about care for Pashchat-Karma, including monitoring for complications and managing patient recovery. B)Record Methodologies (with patient's consent) for educational purposes. Reviewing these videos can help students learn and improve. C) Promote teamwork and collaboration among students, encouraging them to learn from each other’s experiences. Stress the importance of maintaining professionalism, confidentiality, and empathy towards patients. D) Emphasis role of Informed consent. Use role play as an instruction method. E) Use Direct Observation of Procedural Skills (DOPS) as an assessment method.

		• The trainee receives constructive feedback that focuses on essential skills. • An assessor observes a trainee performing a procedure. • The assessor records their observations in a structured form. • The assessor provides immediate feedback to the trainee. • The format for DOPS can be found at https://www.iscp.ac.uk/static/public/DOPSJul2015.pdf.
NLHP 31.2	Evaluation of Ardhavabhedaka.	A) Present a clinical case of Ardhavabhedhaka, and have students work in groups to gather history, discuss differential diagnoses, and plan management. Encourage students to teach each other history-taking techniques, which reinforces their learning and builds confidence. Have students shadow experienced clinicians during patient history taking to observe best practices and techniques and facilitate post-shadowing discussions. OR B) Use standardized patients(actors or fellow students)to role-play patients with Ardhavabhedaka. C) Have students keep reflective journals where they document their experiences, challenges, and learning points from taking patient histories. D) Conduct OSCEs where students rotate through stations to practice history taking and receive immediate feedback. Encourage students to assess their own performance and identify areas for improvement. Self-assessment can be done on following parameters:- Team work , empathy and openness, ethical awareness, work planning, scientific method of working, structuring, and coping with mistakes.

Topic 32 Karna Rachana Shareera, Nidana Panchaka and Samanya Chikitsa of Karnaroga (LH :2 NLHT: 2 NLHP: 4)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO2	Define Karna Nirukti, Karna Shareera (Asthi, Sandhi, Peshi, Sira, Marma) and Shravanendriya, Enlist Karna Rogas,Explain	CK	MK	K	L,L&PPT	M-POS,DEB,PRN,T-O	F&S	I	-	LH

	Samanya Nidana, Samanya Samprapti and Describe Samanya Chikitsa of Karna Roga.					BT,S-LAQ				
CO1	Describe the anatomy of different structures of Karna - Ear (External, Middle, and Internal) and clinical application.	CC	MK	KH	L&PPT,PER,ML,L_VC,DIS	P-VIVA,PUZ,PRN,S-LAQ,VV-Viva	F&S	I	V-RS,V-RS	NLHT32.1
CO1, CO2, CO4, CO5	Elaborate Karna Roga- Samanya Nidana, Samanya Samprapti and Sadhya-asadhyata.	CC	MK	K	L&PPT,LS,L&GD,DIS,SDL	P-REC,VV-Viva,M-POS,T-OBT,CL-PR	F&S	I	V-RN	NLHT32.2
CO3, CO7	Examination of Karna.Demonstrate the use of a headlamp and otoscopy in the examination of Karna, Nasa and Mukha (Ear, Nose and Throat).	PSY-GUD	MK	SH	PT,TUT,TBL,RP,ML	P-ID,Log book,P-PRF	F&S	I	-	NLHP32.1
CO5, CO6, CO7	Present cases of Karnarogas.	AFT-RES	MK	SH	D-BED,PBL,TUT,SIM,RP	DOAP,OSCE	F&S	I	-	NLHP32.2

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 32.1	Presentation on Anatomy of Ear.	A) The teacher should provide the link for audio-visual/animation presentations a week before the actual class through various messaging services or Google Classroom. The students can then be divided into three groups, each for External, middle, and internal ear; and they will go through those videos and present in front of the entire class. The time duration for each group will be 15 minutes. B) PowerPoint presentations should be assessed on the following criteria- content, grammar and spelling, delivery of the material, audience engagement, handling nerves, and effective use of visual aids. OR

		Models can be used to assess the ability to show important landmarks of the external, middle, and internal ear on. C)The teacher should use puzzles to identify the point/s, and knowledge they have learnt during the session.
NLHT 32.2	Samanya Nidana,Samanya Samprapti,Sadhya-asadhyata of Karna Rogas.	A) The teacher provides link of powerpoint presentation about the common Samanya Nidana, Samprapti and Sadhya-asadhyata of Karna Rogas. Teacher will then form three study groups to discuss and share information, each for Samanya Nidana, Samprapti and Sadhya-asadhyata. Students will be directed to compile Nidana, Samprapti, and Sadhya-asadhyata from various Ayurveda Classics. Teacher should encourage them to study by themselves, discuss with peers, review each other’s notes and findings to ensure accuracy and comprehensiveness. They can be advised by the teacher to go to the library and ask Librarian's help. B) At the end of session, the students should summarize what they have learned and present it in front of the teacher. Each group will be given 10 minutes. C) A discussion will take place about mechanism of each nidana to karnaroga and logic behind their prognosis. (15 min.) D) Evaluation to be done on the basis of : • Content Accuracy, any factual errors or inconsistencies. • Completeness. • Organization- presented in logical and coherent structure. • Clarity of language and explanation of technical terms. • Consistency, uniform presentation of citations and references. OR Open book test can be used for assessment. OR Posters made by students are assessed. OR Recitation competition of Shlokas can be arranged.

Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 32.1	Identification and use of basic Ear OPD Instruments.	A)The teacher should explain to students why examination is crucial for diagnosis. B) The teacher should conduct live demonstrations with real or simulated patients to model effective case-taking. OR The Teacher can make use of videos of experienced clinicians to make students understand the correct use of OPD Instruments. The teacher should then explain parts of instruments, instructions, indications, and contraindications. The teacher can use standardized patients (actors trained to simulate real patient cases) to perform a step-by-step demonstration in a controlled environment. Emphasize key points like technique, safety, and anatomical landmarks should be done. OR C) The Teacher should teach students the importance of building rapport and demonstrating empathy during patient interactions. D) Students should be provided constructive feedback on their performance, highlighting areas of improvement and excellence. E) The teacher should see to it that the student is able to identify instruments used in Karna, Nasa, Mukha OPD. The teacher should observe if the student is able to use a headlamp and do otoscopy with the help of otoscope/endoscope. The teacher should ensure that the student is able to use other OPD-based Ear instruments effectively on patients under the guidance of the Consultant and examine Karna.
NLHP 32.2	Case taking in Karnaroga.	A) The teacher should elaborate on the key points needed to keep in mind while taking a clinical case of Karnaroga. The teacher should then have students work in groups to gather history, discuss differential diagnoses, and plan management. After analyzing the information that the students have gathered while working in groups, the teacher should then teach students other history-taking techniques, which reinforce their learning and builds

		confidence. OR B) The teacher should utilize advanced simulation technology to create realistic patient scenarios. The students should then be engaged with virtual patient software that simulates real-life scenarios, helping them practice history-taking and clinical reasoning skills. OR The Teacher can use standardized patients(actors or fellow students)to role-play patients with Karnaroga. B) The teacher should teach students the importance of making patients comfortable and should later help the student to understand the importance of informing the patient what he/she is going to do for case-taking purposes. The teacher should then observe the student while he/she takes generalized history, and see to it if the student understands the relation between systemic and neighboring diseases and karnarogas. C) The teacher should evaluate on the basis of OSCE. The teacher at the end should provide constructive feedback on their performance, highlighting areas of improvement and excellence.

Topic 33 Karnaroga 1 (LH :2 NLHT: 0 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO3, CO4, CO5, CO6	Describe Samprapti and Lakshanas of Karnashoola as per Acharya Sushruta.Enlist types and lakshanas of Karnashoola as per Acharya Vagbhata.Describe Chikitsa of Karnashoola.Describe Samprapti,Lakshanas and Chikitsa of Karna Shopha.	CC	MK	KH	L,L&GD	CL-PR,QZ,T-OBT	F&S	I	-	LH
CO2, CO3, CO4, CO5, CO7	Present an appropriate history in a patient presenting with Karnashoola (Otalgia).	AFT-RES	MK	SH	X-Ray,PBL,CD,RP,PT	PP-Practical, C-VC,OSCE,P-RP,P-EXAM	F&S	I	-	NLHP33.1

Non Lecture Hour Theory		
S.No	**Name of Activity**	**Description of Theory Activity**
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 33.1	Evaluation of Karnashoola (Otalgia).	A)The teacher should explain to the students why case-taking is crucial for diagnosis and treatment planning. The teacher can later conduct live demonstrations with real or simulated patients to model effective case-taking. Videos of experienced clinicians can also be shown to the students to understand Karnashoola (Otalgia). The teacher should provide a structured framework for students to follow during case-taking. B)The teacher should teach Mnemonics like OLD CARTS (Onset, Location, duration, Character, Aggravating/relieving factors, timing, severity) The students can also be engaged with virtual patient software that simulates real-life scenarios, helping them practice history-taking and clinical reasoning skills. The teacher can use standardized patients (actors or fellow students)to role-play patients with Karnashoola (Otalgia). The teacher should teach students the importance of building rapport and demonstrating empathy during patient interactions. Students should also know the role and importance of active listening. The teacher can Integrate case-taking with physical examination skills, teaching students correlations between them. C) MINI-CEX or OSCE can be used to assess. Students should be provided constructive feedback on their performance, highlighting areas of improvement and excellence. The format can be downloaded from https://www.ranzcr.com/images/20211015_RO_Mini-CEX_Assessment_Form.pdf. A similar format can be developed.
Topic 34 Nasa Shareera, Ghranendriya and Nidana Panchaka of Nasaroga (LH :2 NLHT: 1 NLHP: 2)		

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1	Explain Nasashareera (Applied Rachana and Kriyashareera of Nasa and Nasagandakutalalatasthi-kuhara).Explain Kriya of Ghranendriya and physiology of olfaction.	CC	MK	KH	L&PPT ,L	T-OBT,VV -Viva,COM ,QZ	F&S	I	V-RS,V -KS,V-RS	LH
CO2, CO5	Enumerate Nasarogas.Describe etiological factors of Nasarogas.Enlist Pathya-apathya and Sadhya-asadhyatwa of Nasarogas; indications and contra-indications for Dhumapana specific to Shalakyatantra.Discuss Poorva-Pradhana-Pashchat Karma and complications of Dhumapana and its management.	CC	MK	KH	L&PPT ,L	T-OBT,VV-Viva,QZ ,PUZ,M-POS	F&S	I	-	LH
CO3, CO5	Describe Nasya in Diseases described in Shalakyatantra.Summarise current research studies on Nasya and Dhumapana in the diseases of Shira, Karna, Nasa, and Mukha.	CC	DK	KH	DIS,FC, TBL,LS	M-CHT,CL -PR,M-POS,QZ ,VV-Viva	F&S	I	H-PK	NLHT34.1
CO2, CO5, CO7	Present cases of Nasaroga.	AFT-RES	MK	SH	CD,PBL ,D-BED	OSCE,P-CASE,VV-Viva,SP	F&S	I	-	NLHP34.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 34.1	Discussion on Nasya. Current research studies on Nasya and Dhumapana in diseases in Shalakyatantra.	A) The teacher makes four groups of students. Each group is given a subtopic as - a) Enlist indications and contra-indications for Nasya, in conditions in Shalakyatantra. b) Describe complications of Nasya and its management. c) Summarise current research on Nasya in diseases described in Shalakyatantra. d) Summarise current research on Dhumapana related to Shalakyatantra. Students may compile the information about the topics (Pre-class) and one, two or three students from each group present in class. Other groups may critically discuss the topics, by asking questions, in the classroom. Each group will be given 10-15 minutes to present.

		Encourage all students to contribute their thoughts, opinions, and evidence-based reasoning, ensuring everyone has a chance to speak. Ask probing questions to challenge assumptions, evaluate different perspectives, and encourage students to justify their reasoning. Emphasize the importance of listening attentively to others' viewpoints and building on ideas respectfully. Provide feedback: Assessment can be done on the following criteria:- Communication skills, Teamwork, Critical thinking, Body language, and Interpersonal skills. OR The teacher asks students to prepare Posters. Each group is given 10-12 minutes to present in the classroom. Assessment is made on the basis of clarity of information, visual appeal, scientific soundness, and whether key elements are presented clearly and concisely, while also considering the visual design and readability from a distance.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 34.1	General histroy taking, Specific history taking in the cases of Nasaroga.	A) The teacher makes groups of 03 students and asks them to check patients in Nasa opd. After initial introduction and demographic history taking they learn to gather comprehensive and relative information from the patients specific to Nasaroga. Students may practice taking histories with each other or with simulated patients. OR B) The teacher may choose four students to volunteer as patients, they are given a standard set of symptomatology, preferably written, about a nasal disease, which they would answer to their enquiring peers. Introduce mnemonics like OPQRST: Onset, Provocation / Palliation, Quality, Region/Radiation, Severity, Timing; to guide. Learn to understand the relation of diseases' neighboring structures and systemic diseases with nasarogas.

		Learn to Document in proper format. Encourage interactive sessions where students can discuss their experiences, challenges, and strategies. C)Use Observed Structured Clinical Examination OR Simulated Patients to assess. • OSCE stations to have signs of General examination, local examination, psychomotor skills, communication skills and history taking of a case of Nasaroga. The assessor should use checklists to evaluate students' performance in a reliable and consistent way. Performance can recorded on a 4-point scale where 1 is unacceptable, 2 is below expectation, 3 is met expectations, and 4 is exceeded expectations. • Communication skills to be assessed by Kalamazoo essential elements communication checklist. • Each student is exposed to the same stations and assessment Give constructive feedback on their skills. • Simulated patients can be as a part of OSCE or a separate assessment. Students or actors are provided with written, specific, clear-cut instructions and clinical features of a nasaroga and the students are rotated through this setup. They are assessed in the areas like history taking, physical examination, and counseling skills.

Topic 35 Pratishyaya (LH :3 NLHT: 1 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Define Paribhashha of Pratishyaya.Describe the Hetus, Samprapti, Purvarupa, Lakshana, and the Importance (Significance in relation to overall health)of Pratishyaya.(Vataja, Pittaja, Kaphaja, Saanipataja, Raktaja, Ama, Pakva).	CC	MK	KH	L&PPT ,L	QZ ,T-OBT	F&S	I	-	LH
CO2, CO5	Explain Upadrava, Sadhyasadhyata and Chikitsa of Pratishyaya. Elaborate Nidana, Samprapti, Lakshanas and Chikitsa of Dushtapratishyaya.	CC	MK	KH	L,L&PPT	VV-Viva,T-OBT,QZ	F&S	I	-	LH
CO2,	Discuss Nidana, Samprapti, Lakshanas and Chikitsa of Puyarakta,	CC	MK	KH	DIS,PL,	T-OBT,P-P	F&S	I	-	NLHT35.1

CO5	Nasapaka, and Nasashopha.				L&PPT	OS,VV-Viva,CL-PR				

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 35.1	Discussion on Puyarakta, Nasapaka, Nasashopha.	A) The teacher will form three study groups to discuss and share information, each for Puyarakta, Nasapaka, and Nasashopha. (Pre-class) They can go to the library, ask the Librarian's help, they can subdivide subtopics amongst themselves, and split time between different activities like searching for articles, reading, and taking notes. Students will study themselves, discuss with peers, and review each other’s notes and findings to ensure accuracy and comprehensiveness. They will present the information with a PowerPoint presentation in the classroom. (15 min. each)OR they can present posters in the classroom. PowerPoint presentations should be assessed on the following criteria- content, focus, clarity and coherence, in-depth analysis, grammar and spelling, delivery of the material, audience engagement, handling nerves, and effective use of visual aids. OR They can be subjected to an Open-book test. B) At the end of the session, the teacher should summarize what they have learned and plan what to do next. (05 min.)

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity

Topic 36 Mukha Shareera and Nidana Panchaka of Mukharoga (LH :1 NLHT: 1 NLHP: 4)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1	Define Paribhasha of Mukha, Describe the anatomy of Ostha (lips), Mukha-kuhara (oral cavity), Jivha(tongue), Danta (teeth), Gala- Talu (Pharynx), Lalagranthi -Salivary glands (parotid, submandibular) and Swarayantra (larynx).	CC	MK	KH	LS,DIS, FC,ML	CL-PR,QZ	F	I	V-RS,V-RS	NLHT36.1

CO3, CO7, CO8	Present an appropriate history in a patient presenting with an Oro – dental complaint.	AFT-RES	MK	SH	PBL,D-BED,RP,TUT	P-EXAM,P-CASE,OSCE,SP,C-INT	F	I	-	NLHP36.1
CO3, CO7, CO8	Demonstrate Kavala , Gandusha, Pratisarana.	PSY-MEC	MK	D	RP,D-BED,TUT,PBL	DOAP	F	I	-	NLHP36.2
CO2, CO5	Describe Classification (based on Adhishthana and Sadhya-asadhyata), Samanya Chikitsa (Kavala, Gandusha and Pratisarana – Their indications, contraindications, types and procedure) and Pathya-apathya of Mukha Roga along with Nidana Panchaka.	CC	MK	KH	L	PRN,P-VIVA,SP,T-CS,T-OBT	F&S	I	-	LH

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 36.1	Elaboration on Mukha- Shareera.	A) Make 08 teams and give them subtopics as Paribhasha of Mukha, Anatomy of Oshtha (lips), Mukha-kuhara (oral cavity), Jivha(tongue), Danta (teeth), Gala- Talu (Pharynx), Lalagranthi -Salivary glands (parotid, submandibular) and Swarayantra (larynx). The students will be given a link to a PowerPoint presentation on these topics. The presentation on the topic should be prepared and uploaded on a website created for the students or free cross-platform messaging services like WhatsApp, Telegram or learning platforms like Google Classroom. They should be also instructed to go through the textbooks and read this topic. They should be given 01 week time before the scheduled Flipped ClassRoom for this topic. After 01 week of self-learning, problem-based questions related to the topics may be asked and discussed with the students. Students will be also encouraged to ask questions to clarify concepts. Present in the classroom. B) Utilize pre-class quizzes or short assignments to gauge students' prior knowledge and preparation for the in-class activities; During class discussions, pay attention to student participation, level of curiosity, and willingness to ask questions and assess their engagement; Encourage students to reflect

		on their learning process and identify areas where they need further support; Review and re-solve the problems they get wrong. It is preferable to provide self-evaluation in the flipped classroom in a simple form, such as a quiz. Give constructive feedback.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 36.1	Oro - Dental case taking and examination.	A) Conduct live demonstrations with real or simulated patients to model effective case-taking. Use videos of experienced clinicians. Provide a structured framework for students to follow during case taking. Preparation and Review of Available Records B) Self-Introduction and Rapport Building Recording the Chief Complaint Collecting Past Medical History, Medications, Allergies, and Family History Gathering Social History Review of Systems (ROS) C) Patient Positioning and Instructions Inspection of the Lips and Perioral Area Examination of the Buccal Mucosa and Gingiva Examination of the Hard and Soft Palate Inspection of the Tongue Examination of the Floor of the Mouth and Sublingual Area Examination of the Oropharynx Pay special attention to changes in color, ulcers, bleeding, growths and other variations in concerned areas. Differentiate Lecoplakia, and Erythroplakia. Palpation of the Oral Cavity. D) Closing (Thanking the patient). E) Use the Simulated Patient technique or OSCE to evaluate the students.

NLHP 36.2	Poorva, Pradhana and Pashchat Karma of Kavala, Gandusha and Mukhapratisarana.	A)Discuss the patient's history, diagnosis, and therapy plan, its preparation, Sambhara-samgraha, preparation of the patient, Pradhanakarma, and Pashchat karma, in detail before entering the therapy room. B)Emphasize the importance of a hygeinic environment. Ensure students understand the correct use of PPE if needed. C) Walk students through the procedure step-by-step, explaining the purpose and technique of each step. D) Foster an environment where students feel comfortable asking questions and seeking clarification. E)Teach students about post-operative care, including monitoring for complications and managing patient recovery. F)Record procedures (with patient consent) for educational purposes. Reviewing these videos can help students learn and improve. G)Promote teamwork and collaboration among students, encouraging them to learn from each other's experiences. Stress the importance of maintaining professionalism, confidentiality, and empathy towards patients. H) Assess the students on the basis of DOAP.

Topic 37 Oshtharoga (LH :1 NLHT: 0 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Elaborate clinical features and treatment of Vataja, Pittaja, Kaphaja Oshthakopa (Chelitis) Khandoushtha (Cleft lip), Jalarbuda, Herpes labialis and Lip Mucocele.	CC	MK	KH	L,L&PPT	T-OBT,QZ,T-CS	F&S	I	-	LH

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity

Topic 38 Sarvasara Mukharoga (LH :2 NLHT: 0 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO2, CO5	Describe the clinical features and treatment of Vatika, Pittaja, Kaphaja, Raktaja, Sannipatika Sarvasara along with Stomatitis, and Oral candidiasis.	CC	MK	KH	L&PPT	T-CS,VV-Viva,P-VIVA,T-OBT,QZ	F&S	I	-	LH
CO2, CO5	Explain the etiology, clinical features and treatment of Oral submucous fibrosis, and Tumours of the oral cavity, (Pleomorphic adenoma, Malignancies of tongue, palate and oral mucosa).	CC	NK	KH	L&PPT	T-OBT,QZ ,T-CS,INT, M-CHT	F&S	I	-	LH

Non Lecture Hour Theory		
S.No	**Name of Activity**	**Description of Theory Activity**

Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**

Topic 39 National Oral Health Programme (LH :0 NLHT: 1 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO2, CO5	Describe National Oral Health Programme.Explain methods for the prevention of oral malignancy.Present methods of prevention of oral diseases mentioned in Ayurvedic classics.	CC	DK	KH	ML,PSM,BL,BS,DIS	P-RP,DEB, QZ ,PRN, M-POS	F	I	-	NLHT39.1

Non Lecture Hour Theory		
S.No	**Name of Activity**	**Description of Theory Activity**
NLHT 39.1	Brainstorming session on National Oral Health Programme and Dantarakshavidhi.	1. Introduction & Group Allocation (5 minutes)

- Briefly explain the session’s structure and learning outcomes.
- Divide students into three groups:
    - Group 1: National Oral Health Programme (NOHP)
    - Group 2: Prevention of Oral Malignancy
    - Group 3: Prevention According to Ayurveda Classics

2. Group Discussions & Brainstorming (15 minutes)

- Group 1 (NOHP):
    - Presentation on key components of the National Oral Health Programme (prepared in advance).
    - Stress the scientific nature of Dantaraksha Vidhi and its role in modern dentistry.
    - Identify gaps in implementation and suggest improvements.
- Groups 2 & 3:
    - Prevention of Oral Malignancy:
        - Brainstorm common etiologies (tobacco, betel nut, alcohol, infections).
        - Discuss public awareness strategies for prevention.
    - Ayurveda-Based Prevention:
        - Discuss Ayurveda’s perspective on oral health maintenance (Dantaraksha Vidhi, Dinacharya, Rasayana therapy, dietary habits, and herbal formulations).
- Encourage open sharing with no judgment.

- Utilize whiteboards/digital tools to map ideas visually.

3. Group Presentations (15 minutes)

		• Each group gets 5 minutes to present key takeaways. • Others can ask questions and add inputs. 4. Idea Refinement & Action Plan (10 minutes) • Evaluate the strengths and weaknesses of each group's ideas. • Develop an action plan: ◦ Steps for public awareness campaigns. ◦ Community-based interventions. ◦ Ayurveda-based preventive strategies in clinical practice. 5. Conclusion & Takeaways (5 minutes) • Reinforce the importance of public awareness in preventing oral malignancies. • Summarize key learnings. • Encourage students to implement their ideas in clinical practice and community health initiatives.

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity

Topic 40 Kapalagata Roga (LH :1 NLHT: 0 NLHP: 4)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Explain Samprapti, Lakshana, Chikitsa of Darunaka, Indraluptha, Khalitya and Palitya.	CC	DK	KH	L&PPT,L	CL-PR,PRN,T-CS,P-ID	F&S	II	-	LH
CO3, CO7	Decipher the steps involved in Prachchhana, and Jalaukavacharana.	CC	DK	KH	D,PT	CHK,VV-Viva,M-POS	F&S	II	-	NLHP40.1

CO3, CO7	Summarise the steps involved in performing Agnikarma in Shiroroga/Kapalagata Roga.	CC	DK	KH	PT,D,PER	DOPS,P-VIVA,DOPS, CL-PR	F&S	II	-	NLHP40.2

Non Lecture Hour Theory		
S.No	**Name of Activity**	**Description of Theory Activity**
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 40.1	Purva- Pradhana and Pashchat Karma related to the procedures of Prachchhanna and Jalaukavacharana.	A) The teacher may- Use anatomical models, diagrams, and 3D animations to illustrate the procedures. OR Show recorded these procedures to give students a realistic view of the process. Pause at key moments to explain important steps. Explain each step thoroughly, including the rationale behind each action. Provide students with procedural checklists to help them remember the steps and ensure nothing is missed. B) The student may be a part of a team that does these procedures. C)Stress the importance of patient safety, aseptic techniques, and surgical hygiene. D) Discuss ethical issues related to surgical or Para surgical aspects, including informed consent, patient confidentiality, and decision-making E) Encourage students to ask questions and discuss the procedure as it unfolds. Foster a collaborative learning environment. F) The teacher should Include scenarios where complications arise and teach students how to manage these situations. G) Use Poster making and checklists to evaluate students' understanding and skills. H) Provide constructive feedback on their performance, highlighting areas of improvement and excellence.
NLHP 40.2	Discussion on Agnikarma in Shiroroga.	A) The teacher may-

		Use anatomical models, diagrams, and 3D animations to illustrate the procedures. OR Show recorded these procedure to give students a realistic view of the process. Pause at key moments to explain important steps. Explain each step thoroughly, including the rationale behind each action. Provide students with procedural checklists to help them remember the steps and ensure nothing is missed. OR B) The student may be a part of a team that does these procedures. C)Stress the importance of patient safety, aseptic techniques, and surgical hygiene. D) Discuss ethical issues including informed consent, patient confidentiality, and decision-making E) Encourage students to ask questions and discuss the procedure as it unfolds. Foster a collaborative learning environment. F) The teacher should Include scenarios where complications arise and teach students how to manage these situations. G) Use quizzes, written exams, and practical assessments to evaluate students' understanding and skills. J) Provide constructive feedback on their performance, highlighting areas of improvement and excellence.

Topic 41 Karna Kriya Shareera and Shravanendriya (LH :0 NLHT: 1 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1	Describe Kriya Shareera of Karna and Shravanendriya.Explain the Physiology of Equilibrium.	CC	MK	KH	L&GD, FC,RP, DIS,D-M	QZ ,S-LAQ ,PA,T-OBT ,CL-PR	F&S	II	-	NLHT41.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity

NLHT 41.1	Discussion on Shareer Kriya of Karna and Shravanendriya, and Physiology of Equilibrium.	A) The teacher can divide students into groups and conduct a group discussion on Jnana of Srotra-Pratyaksha, Conductive Apparatus, Perceiving Apparatus and Auditory Pathway; balance mechanism and importance of the inner ear in maintaining balance of human body. Divide students into groups of 5-8 for optimal interaction and participation. Consider assigning roles like facilitator (to guide discussion), timekeeper (to manage time), and notetaker (to record key points). Clearly introduce the topic, providing necessary background information and key questions to guide the discussion. Encourage all students to contribute their thoughts, opinions, and evidence-based reasoning, ensuring everyone has a chance to speak. Ask probing questions to challenge assumptions, evaluate different perspectives, and encourage students to justify their reasoning. Emphasize the importance of listening attentively to others' viewpoints and building on ideas respectfully. B) Provide feedback: evaluate on the criteria like Communication skills, Teamwork, Critical thinking, Body language, and Interpersonal skills and give constructive feedback. OR Use poster presentations or theory open-book test as assessment methods.

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity

Topic 42 Karna Badhirya, Karna Naada and Kshweda (LH :3 NLHT: 1 NLHP: 12)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO3, CO5	Describe Hetu, Samprapti, Lakshanas and Chikitsa of Karna Badhirya.Explain types of Hearing Loss (Conductive, Sensorineural and Mixed) and its investigations (Tunning Fork Test, Audiometry, Impedance Audiometry).Summarise Etiology, Pathology, Differential Diagnosis of Otosclerosis, Medical and	CC	MK	KH	BL,L&P PT ,L,PER	T-OBT,CL-PR,DEB,P-EXAM,PP-Practical	F&S	II	-	LH

	Surgical Management of Otosclerosis.									
CO2, CO3, CO5	Explain Hetus, Lakshanas, Samprapti and Chikitsa of Karna Naada, Karna Kshweda.Describe types and Causes, Investigation and Treatment of Tinnitus.	CC	MK	KH	L,L&PPT	QZ ,S-LAQ ,PP-Practical,CL-PR,P-VIVA	F&S	II	-	LH
CO7	Describe the National Program for Prevention and Control of Deafness.Elaborate Causes and ill effects of Noise Pollution.	CC	DK	K	RP,BL	P-RP,M-POS,VV-Viva	F&S	II	-	NLHT42.1
CO2, CO3, CO4	Present an appropriate history in a patient presenting with Badhirya (Deafness).	AFT-RES	MK	SH	L_VC,RP,PBL, D-BED, TUT	P-CASE,VV-Viva,OSCE,Mini-CEX	F&S	II	-	NLHP42.1
CO3, CO4, CO5	Demonstrate the technique of Tuning fork Tests.	PSY-MEC	MK	SH	TUT,CD,RP,D, PBL	DOPS,VV-Viva,CL-PR,PP-Practical,DOPS	F&S	II	-	NLHP42.2
CO3, CO5	Summarise the technique of Audiometry and interpret reports of Audiogram.	CC	DK	SH	D-M,PT ,D,RP, ML	Log book,P-RP,OSPE, P-EXAM,P-PRF	F&S	II	-	NLHP42.3
CO2, CO3, CO4	Present an appropriate history in a patient presenting with Karna Kshweda- Naada (Tinnitus)-	AFT-RES	MK	SH	PT,D-BED,CD, PBL,TUT	QZ ,P-CASE,P-PRF,P-VIVA,S-LAQ	F&S	II	-	NLHP42.4
CO5, CO6, CO7	Perform a procedure of Karnapoorana.	PSY-GUD	MK	SH	PT,PBL ,D-BED ,SDL	VV-Viva,P-PRF,SA,DOPS,P-EXAM	F&S	II	-	NLHP42.5

CO5, CO6	Summarise the steps involved in performing Karna Pramarjana, Karna Prakshalana and Karna Dhoopana.	CC	MK	KH	L_VC,D-BED,PBL	P-EXAM,P-MOD,CHK,Log book	F&S	II	-	NLHP42.6

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 42.1	Group discussion on National Programme for Prevention and Control of Deafness and Noise Pollution.	A) Divide the class into small groups and provide each group with printed brochures and posters about NPPCD. Ask each group to discuss the key messages and strategies presented in the materials. (Pre-class) Show a short video or presentation highlighting key points about hearing health and the National Program for Prevention and Control of Deafness(NPPCD).(05-08 minutes). B)Role-Playing (30 minutes): - Assign roles to students (e.g., healthcare providers, community members, patients) and provide them with role-play scripts. - Have students act out scenarios where they educate community members about hearing health and the NPPCD initiatives. Role Play Scenarios: Scenario 1: A festival Scenario 2: Emergency room with case of sudden hearing loss Scenario 3: Care and Follow-Up education to society. Encourage students to act out their roles as realistically as possible, using appropriate terminology and interactions. - Encourage students to use the brochures and posters to support their role-play. - Encourage students to share their thoughts on how they can contribute to hearing health awareness in their communities. Rotate roles to ensure each student gets to practice different aspects of management. Give clear instructions and guidelines for the role-play scenarios, including the causes and control of noise pollution; hierarchical arrangements of National Program for Prevention and Control of Deafness - Allow students to ask questions and discuss their actions during the role play. - Ask students to write a short reflection on what they learned from the activity and how they can

		apply this knowledge in real-life situations. B) Provide feedback on their participation and understanding of the NPPCD.(10 min.) - Assess students based on their engagement and contributions during the group discussion and role-play. - Evaluate the quality and clarity of their role-play presentations. - Review their written reflections to gauge their understanding and personal takeaways from the activity. - Group Discussion- After each scenario, conduct a debriefing session where students can discuss their experiences, challenges, and what they learned.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 42.1	Case Taking and Differential Diagnosis of Badhirya.	A)Teacher should teach students the basic way of case taking which starts with the student introducing himself/herself to patient. Student should then make patients comfortable and then inform patient what he/she is going to do for case-taking purpose. Student should take proper history of the patient and present differential diagnosis of Karna Badhirya (Deafness) in front of the class. Student should then be encouraged to come to proper diagnosis by performing various tuning fork tests. B) Teacher should see that students conduct live demonstrations with real or simulated patients to model effective case-taking. OR Use videos of experienced clinicians can be done by the teacher to demonstrate ways of diagnosing Karna Badhirya. C) Students should be provided a structured framework to follow during case taking. Integrate case-taking with physical examination skills, teaching students correlations between them. E) Observed Structured Clinical Examination:

		• OSCE stations to have signs of General examination, local examination, psychomotor skills, communication skills and history taking of a particular examination. The assessor should use checklists to evaluate students' performance in a reliable and consistent way. • Communication skills to be assessed by Kalamazoo essential elements communication checklist. Each student is exposed to the same stations and assessment. Teacher should discuss the areas for improvement with students.
NLHP 42.2	Tuning Fork Test (Rinne's, Weber) and their interpretation.	Teacher should teach students various frequencies of Tuning forks used in OPD. Students should be taught basics of tuning fork tests. A) Students will be divided in various groups and demonstrate on patients basic tunning fork tests under the Guidance of the Consultant. OR A)Teacher should assign roles to students, such as the patient, the primary care provider, a nurse, and an observer. Rotate roles to ensure each student gets to practice. Teacher should give clear instructions and guidelines for the role-play scenarios, including the symptoms and history of the patient. C) Students should be encouraged to reflect on their own performance and identify areas for improvement. Self-assessment can be done on the following parameters:- Teamwork and collegiality, empathy and openness, ethical awareness, scientific method of working, coping with mistakes, and priorities.
NLHP 42.3	Audiometry and its interpretation.	A) The teacher should teach students the basic concepts of Audiometry. The student will observe the correct way of positioning the patient while doing Audiometry in a soundproof room. Students will learn how to use an Audiometry machine and the basics of how to switch between Air and Bone conduction in the Audiometry Machine. Student should be taught basics of masking and how it is shown on Audiogram.

		Student should also be taught the technique of reading audiogram. B)The teacher should conduct live demonstrations with real or simulated patients to model effective performance. OR C)The teacher can show videos of experienced clinicians demonstrating the correct technique of doing Audiometry. Student should be able to explain parts of instruments, instructions, indications, and contraindications. OR D)Teacher can use standardized patients (actors trained to simulate real patient cases) to perform a step-by-step demonstration in a controlled environment. E)Teacher should teach students the importance of building rapport and demonstrating empathy during patient interactions. F)Evaluate students by Objective Structured Practical Examination. Analyse student's performance on criteria like knowledge of parts of instruments, indications, contra-indications, reading and analysing audiometry reports, building rapport and demonstrating empathy during patient interactions. Provide constructive feedback on their performance.
NLHP 42.4	Assessment of Karna Kshweda-Naada (Tinnitus).	A) The teacher should teach students about Tinnitus, its types and various etiological factors and causes associated with it. 1. Introduction (15 minutes) - Welcome and Introduction (5 minutes): Briefly introduce yourself and the topic. - Objective of the Session (5 minutes): Explain the importance of case-taking in diagnosing and managing tinnitus. - Overview of Tinnitus (5 minutes): Provide a brief overview of what tinnitus is, its prevalence, and its impact on patients. 2. Case History Taking (45 minutes) - Introduction to Case History (10 minutes): Explain the components of a comprehensive case history for tinnitus patients. - Interactive Case Study (30 minutes): Present a sample case study and guide students through the process of taking a detailed case history. Encourage students to ask questions and participate in the

		discussion. - Review and Discussion (5 minutes): Review the case study and discuss the key points that were covered. 3. Diagnostic Tools and Assessments (30 minutes) - Introduction to Diagnostic Tools (10 minutes): Explain the various diagnostic tools and assessments used in evaluating tinnitus (e.g., audiometry, tinnitus matching, questionnaires). - Hands-On Demonstration (15 minutes): Demonstrate how to use these tools and assessments on a volunteer or simulated patient. - Q&A Session (5 minutes): Allow students to ask questions and clarify any doubts. 4. Management and Treatment Options (30 minutes) - Overview of Management Options (10 minutes): Discuss the different management and treatment options available for tinnitus (e.g., hearing aids, sound therapy, cognitive-behavioral therapy). - Case-Based Discussion (15 minutes): Present another case study and discuss the appropriate management and treatment options for the patient. - Q&A Session (5 minutes): Allow students to ask questions and share their thoughts. 5. Conclusion and Wrap-Up (10 minutes)** - Summary of Key Points (5 minutes): Summarize the key points covered in the session. - Feedback and Evaluation (5 minutes): Collect feedback from students and evaluate the effectiveness of the session.
NLHP 42.5	Procedure of Karnapoorana.	A)Students should be taught about Karnapoorana. Students should also be taught about the Indications, Contraindications, Vyapadas and their Management. Student will observe the correct positioning of the patient, materials used and technique of Karnapoorana. B)The student will observe the process of Karnapoorana. After observing everything, students should be divided in groups and should be able to demonstrate Poorvakarma, Pradhanakarma and Pashchatkarma of Karnapoorana under the Guidance of the physician. Teacher should teach students about post-operative care, including monitoring for complications.

		C)- Direct Observation of Procedural Skills- The assessor actively watches the student perform the procedure, noting their technique, decision-making, communication with the patient, and adherence to safety protocols. Students should be provided constructive feedback on their performance. Teacher should encourage students to reflect on their own performance and identify areas for improvement.
NLHP 42.6	Procedures of Karna Pramarjana, Karna Prakshalana, and Karna Dhoopana.	A)The students should be taught Karna Pramarjana, Karna Prakshalana and Karna Dhoopana procedures. The teacher should teach students Indications, Contraindications and Vyapadas along with its management related to these procedures. The teacher should observe students do pre-procedural examinations and take care of post-therapy management. B) The student should observe the main process of Karna Pramajana, Karna prakshalana and Karna Dhoopana under the supervision of the Consultant. OR C) The teacher should show recorded procedures to give students a realistic view of the process. Pause at key moments to explain important steps. Explain each step thoroughly, including the rationale behind each action. D) Students should be provided with procedural checklists to help them remember the steps and ensure nothing is missed. E)Teacher should emphasize on patient safety, aseptic techniques, and hygiene to students. F) The teacher should assess students' log books OR the students can be assessed by the checklist method.

Topic 43 Karna Srava and Putikarna (LH :4 NLHT: 2 NLHP: 4)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2,	Describe Hetu, Lakshana, Samprapti and Chikitsa of Karna Srava.	CC	MK	KH	L,L&PP	P-VIVA,PP	F&S	II	-	LH

CO3, CO4, CO5					T	-Practical,T-CS,P-CASE,P-EXAM				
CO2, CO3, CO4, CO5	Present appropriate history in a patient presenting with Karna Srava (Otorrrhoea)	AFT-RES	MK	SH	RP,D-BED,ML,LS,CD	Log book,P-RP,P-VIVA,P-EXAM,VV-Viva	F&S	II	-	NLHP43.1
CO2, CO3, CO5	Explain Samprapti, Lakshanas and Chikitsa of Putikarna.	CC	MK	KH	LS,PBL,ML,L&GD	T-OBT,P-EXAM,CL-PR,P-VIVA,VV-Viva	F&S	II	-	NLHT43.1
CO1, CO2, CO3, CO4, CO5, CO6	Elucidate Etiology, Pathology, Clinical Features and Management of Acute Suppurative Otitis Media (ASOM)Expound Etiology, Pathology, Clinical Features and Medical Management of Safe Chronic Suppurative Otitis Media (Safe CSOM), Unsafe Chronic Suppurative Otitis Media (Unsafe CSOM) and Serous Otitis Media (SOM).Enumerate Complications of Otitis Media.Summarise the Etiology, Pathology, Clinical Features, and Medical Management of Mastoiditis.	CC	MK	KH	L,L&PPT	COM,P-EXAM,CL-PR,S-LAQ,T-CS	F&S	II	-	LH
CO2, CO3, CO4, CO5	Summarise types and Surgical Steps in Mastoidectomy.Explain Indication, Contra-Indication and Surgical Steps in Myringotomy.	CC	DK	SH	D-BED,PBL,L_VC,ML,X-Ray	P-EXAM,OSCE,P-VIVA	F&S	II	-	NLHP43.2
CO1, CO2, CO3, CO4, CO5	Explain Indications, Contra-Indications, Types and Basic Surgical Steps in Tympanoplasty.	CC	MK	KH	L_VC,D-M,BL,RP,PBL	P-EXAM,QZ,VV-Viva,OSCE	F&S	II	-	NLHT43.2

Non Lecture Hour Theory		
S.No	**Name of Activity**	**Description of Theory Activity**
NLHT 43.1	Presentation on Putikarna.	Putikarna (60 mins) A) Students should be encouraged to compile Samprapti, Lakshsanas and Chikitsa of Putikarna from Ayurveda Classics and Present. Students should then be directed to study themselves, discuss with peers, review each other’s notes and findings to ensure accuracy and comprehensiveness. Students can be guided to go to the library (pre-class), and ask Librarian's help. They can subdivide subtopics amongst themselves and split time between different activities like searching for articles, reading, and taking notes. The students will then be divided into groups and will present their findings in front of the class (7-8 mins per group). The teacher at the end of the session will summarise everything and explain to the class. The students will be assessed by the teacher based on the detailed contents of the topic, presentation skills and answering to questions asked in the class. B)At the end of the session, the teacher should see to it that students should summarize what they have learned and plan what to do next.
NLHT 43.2	Surgical steps in Tympanoplasty.	Tympanoplasty (60 mins) A) The teacher may- Use anatomical models, diagrams, and 3D animations to illustrate surgical procedures (5mins). OR Show recorded surgical procedures to give students a realistic view of the process. Pause at key moments to explain important steps. Explain each step thoroughly, including the rationale behind each action. (20 mins) Provide students with procedural checklists to help them remember the steps and ensure nothing is missed. (5 mins) OR B) The teacher may use Virtual Reality or surgical simulators to provide hands-on practice in a controlled, risk-free environment. C) Have students role-play as surgeons, assistants, or scrub nurses to practice different aspects of the

		procedure. (10 mins) D) Encourage students to ask questions and discuss the procedure as it unfolds. Foster a collaborative learning environment. E) The teacher should Include scenarios where complications arise and teach students how to manage these situations. F) Provide access to reputable online resources and journals for further reading and research. G) Use quizzes, written exams, OSCE,and practical assessments to evaluate students' understanding and skills. (10 mins) H) Provide constructive feedback on their performance, highlighting areas of improvement and excellence. I) Stress the importance of patient safety, aseptic techniques, and surgical hygiene.(5mins) J) Discuss ethical issues related to surgery, including informed consent, patient confidentiality, and decision-making. (5mins)
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 43.1	Etiology, Clinical Features and Medical Management of Karna Srava (Otorrhea).	A)Student should be taught to find out the etiology, clinical features of Karna Srava (Otorrhea) B) For Case taking, the teacher should teach students the basics of case taking which starts with the student introducing himself/herself to patients. Students should then make patients comfortable and inform patient what he/she is going to do for case-taking purposes. The student should then be able to take generalized history of Karna Srava (Otorrhea). Students should also be able to do differential diagnosis, document the case in proper format, present the case and describe the Medical management of Karna Srava (Otorrhea). OR C) Teacher should engage students with virtual patient software that simulates real-life scenarios, helping them practice history-taking and clinical reasoning skills. OR D) The teacher can use standardized patients (actors or fellow students)to role-play patients with

		Karna Srava. Teachers should teach students the importance of building rapport and demonstrating empathy during patient interactions. Students should highlight the role of active listening. E) The teacher should assess students and provide constructive feedback.
NLHP 43.2	Surgical procedures of Mastoidectomy and Myringotomy.	A)Teacher should teach students indications and contra-indications of Mastoidectomy and Myringotomy. Students, with the help of various audio-visual aids and observation under the guidance of consultants, must be able to explain pre-operative and post-operative management and basic surgical steps involved in the surgery. OR B)Student can be encouraged by the teacher to be a part of the surgical team. C)Teacher should teach students about post-operative care, including monitoring for complications and managing patient recovery. D)Teachers/consultants can record surgeries (with patient consent) for educational purposes. Reviewing these videos can help students learn and improve. E)Teachers should provide access to online surgical tutorials, webinars, and interactive platforms for additional learning. F) Teacher should explain the roles and responsibilities of each member of the surgical team. Teacher should promote teamwork and collaboration among students, encouraging them to learn from each other’s experiences. Teacher should stress the importance of maintaining professionalism, confidentiality, and empathy towards patients to students. G) To Assess students' progress OSCE can be adopted which will cover: a. Understanding Surgical Anatomy b. Surgical Steps and its technique c. Patient Management d. Complications of Surgery and its Management.

Topic 44 Karnakandu, Karnaguthaka, Karnapratinaha, Krumikarna, Karnavidradhi, Karnapaka. (LH :2 NLHT: 0 NLHP: 4)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO2, CO5	Describe Samprapti Lakshanas and Chikitsa of Karna Kandu.Describe the Etiology, Pathology, Clinical Features and Management of Otomycosis.	CC	MK	KH	L&PPT ,L	DEB,T-OBT,QZ	F&S	II	-	LH
CO2, CO3, CO4, CO5	Present an appropriate history in a patient presenting with Karna Kandu.	AFT-RES	MK	KH	PBL,TUT,ML,D-BED	P-CASE,P-EXAM,P-PRF,Mini-CEX	F&S	II	-	NLHP44.1
CO1, CO2, CO3, CO4, CO5, CO6	Describe Samprapti, Lakshanas, Upadravas and Chikitsa of Karna Guthaka (Ear Wax).Explain Samprapti, Lakshanas and Chikitsa of Karna Pratinaha and Krimikarna (Maggots in Ear).Decipher Hetu, Lakshanas, Samprapti and Chikitsa of Karna Vidradhi, Karnapaaka (Otitis Externa).	CC	MK	KH	L&PPT ,L	PP-Practical,T-OBT,VV-Viva,CL-PR,QZ	F&S	II	-	LH
CO1, CO3, CO5, CO6	Summarise the technique for removal of Karnaguthaka (ear wax) from the ear.	CC	MK	KH	TUT,PBL,D-BED	Log book,P-CASE,P-VIVA	F&S	II	-	NLHP44.2

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 44.1	Assessment of Karna Kandu.	A)Teacher should teach students the proper way of case taking which starts with students introducing himself/herself to patient.

		Student should then make patients comfortable and inform patient what he/she is going to do for case-taking purpose. Student should then take proper history of patient and present differential diagnosis of Karna Kandu in front of the class. Student should finally come to proper diagnosis and should be able to describe its Management and prognosis. B) Teacher should teach students the importance of building rapport and demonstrating empathy during patient interactions. Students should be highlighted the role of active listening. C) Students should Integrate case-taking with physical examination skills, teaching students correlations between them. D)Evaluate their performance with Mini-CEX. ◦ Observe a Student's interaction with a patient in a real-world clinical setting ◦ Rate the performance in areas like history taking, physical examination, and counseling skills ◦ Teacher should provide constructive feedback on their performance, highlighting areas of improvement and excellence. ◦ performance is recorded on a 4-point scale where 1 is unacceptable, 2 is below expectation, 3 is met expectations, and 4 is exceeded expectations.
NLHP 44.2	Removal of Ear Wax.	A) Teacher should teach student the signs and symptoms of Karnaguthaka (Ear Wax). B)Teacher should emphasize students the importance of aseptic techniques and the steps to maintain a sterile environment. C) Teacher should walk students through the procedure step-by-step, explaining the purpose and technique of each step.

		D)Teacher should teach students about post-operative care, including monitoring for complications and managing patient recovery. E) Students should be provided access to online surgical tutorials, webinars, and interactive platforms for additional learning.

Topic 45 Rhinitis (LH :1 NLHT: 2 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2	Define and Enlist types of Rhinitis.Describe Etiology, Pathology and Clinical Features of Acute Non-specific Rhinitis (The common cold), Allergic Rhinitis, Chronic Hypertrophic Rhinitis and Atrophic Rhinitis.	CC	MK	KH	L,L&PPT	T-OBT,VV-Viva,QZ	F&S	II	-	LH
CO2, CO5	Describe Differential Diagnosis, Investigations, Complications, and Treatment of Acute Non-specific Rhinitis (The common cold).Explain Differential Diagnosis and Treatment of Chronic Hypertrophic Rhinitis.	CC	MK	KH	LS,L&GD,DIS,FC	QZ ,INT,VV-Viva,PRN	F&S	II	-	NLHT45.1
CO2, CO5	Describe Differential Diagnosis, investigations, complications, and medical treatment of Atrophic rhinitis and Allergic rhinitis.Summarize current research studies on Allergic rhinitis.	CC	MK	KH	L&PPT,FC,DIS	CL-PR,PRN,Mini-CEX	F&S	II	-	NLHT45.2

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 45.1	Diagnosis and Treatment of Rhinitis.	A) Teacher will form six study groups to discuss and share information, each for Differential Diagnosis, Investigations, Complications, and Treatment of Acute Non-specific rhinitis (The common cold).; and Differential Diagnosis and Treatment of Chronic Hypertrophic Rhinitis. They should be given 1 week time before the scheduled presentation for this topic. Students will study themselves, discuss with peers, review each other's notes and findings to ensure accuracy and comprehensiveness.

		OR They can go to library, ask Librarian's help, they can subdivide subtopics amongst themselves and split time between different activities like searching for articles, reading and taking notes. Let them summarize what they have learned and present in the classroom. Each group will be given a time of 06-08 minutes. OR B) They can use Flipped Classroom to illustrate different types of rhinitis and their management. Each group will be given a time of 06-08 minutes. Utilize pre-class quizzes or short assignments to gauge students' prior knowledge and preparation for the in-class activities; During class discussions, pay attention to student participation, level of curiosity, and willingness to ask questions to assess their engagement; Encourage students to reflect on their learning process and identify areas where they need further support; Review and re-solve the problems they get wrong. It is preferable to provide self-evaluation in flipped classroom in a simple form, such as a quiz. C) Assessing presentations involves evaluating a speaker's performance, clarity of voice, communication skills, content, time management, use of visual aids, and spelling and grammar.
NLHT 45.2	Diagnosis and treatment of Atrophic and Allergic Rhinitis; Summary of Research studies on Allergic Rhinitis.	Teacher will form Ten study groups to discuss and share information, each for A) Differential Diagnosis, B)Investigations, C) Complications, and D) Medical Treatment of Atrophic Rhinitis; E) Differential Diagnosis, F) Investigations, G)Complications, H) Prevention and I) Medical Treatment of Allergic Rhinitis; J) Current Research studies on Allergic Rhinitis. Teacher sends them to the Library, they can subdivide subtopics amongst themselves and split time between different activities like searching for articles, reading and taking notes. Students will study themselves, discuss with peers, review each others notes and findings to ensure accuracy and comprehensiveness. Librarian can familiarise them with tools like Zotero, to organise and present the research works. Powerpoint presentation or Flipped classroom method will be used to discuss in class.

		Each group will be given 05 minutes to present their topic. At the end of the session, the teacher will summarize what they have learned. Assessment should be done on the following points- content, focus, clarity and coherence, in-depth analysis, grammar and spelling, delivery of the material, audience engagement, handling nerves, and effective use of visual aids.

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity

Topic 46 Deeptadi Nasaroga. (LH :3 NLHT: 1 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO3, CO5, CO6	Describe Samprapti, Lakshana and Chikitsa of Peenasa, Apeenasa, Putinasa (Sinusitis).Define Sinusitis and its types.Describe etiology, pathology, clinical features, differential diagnosis, radiological and laboratory investigations, complications and medical treatment of Sinusitis (Frontal and Maxillary).Describe Surgical Treatment of Sinusitis- Functional endoscopic sinus surgery. (Its indications, contraindications, type of anesthesia, major surgical steps, post-operative care, complications and their management in brief).Describe when to seek an expert opinion, and when to refer for surgery.	CC	MK	KH	L&PPT ,L	QZ ,VV-Viva,CL-PR,S-LAQ	F&S	II	-	LH
CO3, CO4, CO7	Present an appropriate history in a patient presenting with Nasasrava (Rhinorrhoea), Sinusitis.	AFT-RES	MK	SH	D-BED, CD,PBL	OSCE,Mini-CEX,P-VIVA,CBA	F&S	II	-	NLHP46.1
CO2, CO5	Describe Samprapti, Lakshana and Chikitsa of Deepta, Putaka, Nasaparishosha, Bhramshathu, Nasanaha, Kshavathu.	CC	MK	KH	L&PPT ,RP,FC, ML,DIS	COM,PRN, SA,P-VIVA,VV-Viva	F&S	II	-	NLHT46.1

Non Lecture Hour Theory		
S.No	**Name of Activity**	**Description of Theory Activity**
NLHT 46.1	Diagnosis and treatment of Deepta, Putaka, Nasaparishosha, Bhramshathu, Nasanaha, Kshavathu.	A) Teacher will form six study groups to discuss and share information, each for Deepta, Putaka, Nasaparishosha, Bhramshathu, Nasanaha, and Kshavathu (Samprapti, Lakshana and Chikitsa). Use platforms like Google Classroom or messaging services like WhatsApp and telegram to share information on these topics. Students will study themselves, discuss with peers, review each other's notes and findings to ensure accuracy and comprehensiveness. They will do PowerPoint presentation in class. OR The teacher will assign roles to the students such as the patient, the primary care provider, a nurse, and an observer. Rotate roles to ensure each student gets to practice different aspects of management. Give clear instructions and guidelines for the role-play scenarios, including the symptoms and history of the patient. B) At the end of the session, summarize what they have learned and plan what to do next. C) Encourage students to reflect on their own performance and identify areas for improvement. Self-assessment can be done on the following parameters:- Teamwork and collegiality, empathy and openness, ethical awareness, work planning, scientific method of working, structuring, coping with mistakes, and priorities. Presentations can be assessed with the following parameters:- content, focus, clarity and coherence, in-depth analysis, grammar and spelling, delivery of the material, audience engagement, effective use of visual aids.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 46.1	Examination of Nasa and Nasagandakutalalatasthi-kuhara (Nose and Paranasal sinuses). Evaluation of Nasa srava (Rhinorrhoea).	A)Sub-divide students in groups of 4-6. Use problem based learning method. (PBL). Use one patient each for teaching Nasasrava and Sinusitis and as the case unfolds, the teacher should

	Evaluation of Sinusitis.	show how to examine Nasavamsha (Septum), Nasasrotas (Nasal Cavity), Nasagandakutalalatasthi-kuhara.(Paranasal sinuses). Show how to perform Anterior and Posterior rhinoscopy. Discuss Differential Diagnosis of Nasasrava. Later , The student will take a history, examine with proper instruments, document and present the case of patients presenting with Nasa Srava and Sinusitis. Assess the performance of students by MINI-CEX method:- ◦ Observe a Student’s interaction with a patient. ◦ Rate the performance in areas like history taking, physical examination, and counselling skills. ◦ The student receives immediate feedback from the teacher. OR It can be assessed by Observed Structural Clinical Examination (OSCE). • OSCE stations to have signs of General examination, local examination, psychomotor skills, communication skills and history taking of a particular examination . The assessor should use checklists to evaluate students' performance in a reliable and consistent way. • Communication skills to be assessed by Kalamazoo essential elements communication checklist.

Topic 47 Nasavamsha-kutilatwa (Deviated Nasal Septum). (LH :1 NLHT: 1 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO3, CO5	Define and Enlist types of Nasavamsha-kutilatwa (Deviated Nasal Septum).Explain Etio-pathology, Clinical Features, Differential Diagnosis, investigations, complications, and medical mananagement of Nasavamsha-kutilatwa (Deviated Nasal	CC	MK	KH	L,L&PPT	QZ ,CL-PR ,T-OBT,VV-Viva	F&S	II	-	LH

	Septum).									
CO5, CO6	Describe surgical Management of Nasavamsha-kutilatwa (Deviated Nasal Septum).-- Sub mucous resection (SMR), Septoplasty. (Their indications, contraindications, type of anesthesia, major surgical steps, post-operative care, complications and their management in brief).Describe when to seek an expert opinion, and when to refer for surgery.	CC	DK	K	PER,ML,L_VC,DIS	T-OBT,CHK,VV-Viva,P-EXAM,QZ	F&S	II	-	NLHT47.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 47.1	Surgical management of Nasavamsha-kutilatwa (Deviated Nasal Septum).	A) The teacher may- Use anatomical models, diagrams, and 3D animations to illustrate surgical procedures. OR B)He may show recorded surgical procedures to give students a realistic view of the process. Pause at key moments to explain important steps. Explain each step thoroughly, including the rationale behind each action. Provide students with procedural checklists to help them remember the steps and ensure nothing is missed. OR C) Encourage students to ask questions and discuss the procedure as it unfolds. Foster a collaborative learning environment. D) Time Duration- SMR- 40 min. Septoplasty- 15 min. E) The teacher should Include scenarios where complications arise and teach students how to manage these situations. F) Provide access to reputable online resources and journals for further reading and research. G) Use Quizzes, Open book theory tests, Checklists and Class presentations to evaluate students' understanding and skills. Use platforms like Kahoot!, Mentimeter to generate quizzes. H) Stress the importance of patient safety, aseptic techniques, and surgical hygiene. J) Discuss ethical issues related to surgery, including informed consent, patient confidentiality, and

		decision-making. H) Describe when to seek an expert opinion, and when to refer for surgery.

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity

Topic 48 Dantamulagata roga (LH :2 NLHT: 1 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Describe the aetiopathogenesis, clinical features, prevention and treatment of Gingivitis and Periodontitis.Explain the indications for referral in Dantamoolagata Roga	CC	MK	KH	L,L&PPT	T-OBT,QZ,PUZ	F&S	II	-	LH
CO2, CO5	Describe the clinical features and treatment of Paridara, Adhimamsa (Impacted wisdom tooth), and Describe the Nidana, Samprapti, clinical features, classification and treatment of DantaNaadi.	CC	MK	KH	L&PPT	T-OBT,PUZ,M-POS,QZ	F&S	II	-	LH
CO2, CO5	Describe the clinical features and treatment of Sheetada, Upakusha, Dantaveshtaka and Dantavidradhi(Apical abscess).	CC	MK	KH	ML,FC,PBL,L&GD,PL	P-VIVA,M-POS,CL-PR,QZ	F&S	II	-	NLHT48.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 48.1	Laxanas and Chikitsa of Sheetada, Upakusha, Dantaveshtaka and Dantavidradhi.	Pre-Class (Online Learning) – Before the Session • Students access digital resources (videos, articles, or PDFs) shared by the teacher on: ◦ Etiology, Clinical Features, Differential Diagnosis, Complications, and Treatment of: 1. Sheetada

2. Upakusha
3. Dantaveshtaka
4. Dantavidradhi (Apical Abscess)

- They study at their own pace, take notes, and prepare for classroom discussions.

In-Class (Face-to-Face Learning) – 55 Minutes

1. Introduction & Group Formation (5 minutes)

- Teacher gives a brief overview and clarifies learning objectives.
- Students are divided into four groups, each assigned one disease.

2. Group Discussions & Peer Learning (15 minutes)

- Each group collaborates, discussing key aspects from their pre-class study.
- They refine their understanding, compare notes, and identify key points for presentation.
- The teacher acts as a facilitator, clarifying doubts and ensuring accuracy.

3. Group Presentations (20 minutes) – 5 minutes per group

- Each group presents their findings in 5 minutes using:
  - Whiteboards
  - Digital slides
  - Charts or models
- Other students ask questions, ensuring peer engagement.

4. Interactive Q&A & Teacher’s Summary (10 minutes)

		• The teacher provides feedback on presentations, corrects misconceptions, and highlights key learning points. • Class discussion on Ayurvedic relevance and modern perspectives. 5. Assessment & Reflection (5 minutes) • Students are evaluated on presentation skills based on: ◦ Content accuracy and depth ◦ Clarity and coherence ◦ Audience engagement ◦ Delivery and confidence ◦ Use of visual aids • The session concludes with a brief reflection and discussion on next steps for learning.

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity

Topic 49 Jihvagata Roga (LH :1 NLHT: 1 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Describe the clinical features and treatment of Vatika, Paittika and Kaphaja Jihvakantaka and Alasa.	CC	MK	KH	L,L&PPT	QZ ,PUZ,SP,T-CS,VV-Viva	F&S	II	-	LH
CO2, CO5	Describe the clinical features and management of ankyloglossia and glossitis (Hairy tongue, Geographic tongue, Migratory Glossitis).	CC	MK	KH	FC,PL,ML,DIS,LS	VV-Viva,P-VIVA,QZ ,M-POS,CL-PR	F&S	II	-	NLHT49.1

Non Lecture Hour Theory			
S.No	**Name of Activity**	**Description of Theory Activity**	
NLHT 49.1	Clinical features and management of ankyloglossia and glossitis (Hairy tongue, Geographic tongue, Migratory Glossitis).	Symposium Structure & Time Distribution: 1. Introduction & Overview by the Moderator (5 minutes) • The teacher (or a designated student) introduces the theme of the symposium. • Brief explanation of importance, etiology, and general approach to tongue disorders. • Groups are introduced, and the session format is explained. 2. Group Presentations (30 minutes) – 10 minutes per group Each group presents a specific topic, covering: • Definition & Etiology • Clinical Features • Complications • Management & Treatment (Modern & Ayurvedic Approaches) Group 1: Ankyloglossia (Tongue-Tie) Group 2: Hairy Tongue (Lingua Villosa) Group 3: Geographic Tongue (Benign Migratory Glossitis) and Migratory Glossitis 3. Open Discussion & Q&A (10 minutes) • Each group asks questions to other groups, fostering peer learning. • The teacher clarifies doubts and emphasizes key differentiating features. 4. Summary & Takeaways (5 minutes)	

		• The teacher or moderator summarizes the main points. • Discuss the clinical relevance and importance in Ayurveda and modern medicine. • Assign follow-up tasks like writing a short reflective report on what they learned.

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity

Topic 50 Krimidantaka and Dantaharsha (LH :1 NLHT: 1 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Describe the Samprapti, clinical features and treatment of Krimidantaka (Dental carries), and Dantaharsha (Dentin hypersensitivity).	CC	MK	KH	L&PPT	QZ ,VV-Viva,M-POS, SP,T-OBT	F&S	II	-	LH
CO2, CO5	Explain root canal treatment.	CC	DK	KH	L_VC, ML,FC, BL	QZ ,CL-PR,M-POS	F	II	-	NLHT50.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 50.1	Explanation of Root Canal Treatment.	1. Introduction & Visual Learning (10 min) Method: Flipped Classroom • Share pre-session materials (videos, diagrams, articles) on RCT before class. • In-class: Use 3D animations, models, or a video demonstration of the RCT procedure. • Discuss the importance of RCT, indications, and contraindications. 2. Case-Based Discussion (15 min)

Method: Problem-Based Learning (PBL)

- Present a realistic clinical case:
  "A patient complains of severe pain in a molar with deep caries. The tooth is tender on percussion, and X-ray shows periapical pathology."
- Divide students into three groups to discuss:
  - Group 1: Diagnosis (Symptoms, Pulp Testing, X-ray interpretation).
  - Group 2: Step-by-Step RCT Procedure (Access, Cleaning, Shaping, Obturation).
  - Group 3: Post-Treatment Care & Ayurveda-Based Healing Approaches.
- Each group presents findings, followed by discussion.

3. Simulation & Demonstration (15 min)
Method: DIY Simulation

- Use readily available models to simulate RCT steps:
  - Soap Carving Method: Students carve access cavities on soap bars or wax blocks to understand instrument handling.
  - Clay Model Demonstration: Representing root canal anatomy.
  - Use tooth models with X-ray images for visualization.
- If possible, invite a guest dentist or use a virtual demonstration.

4. Interactive Q&A & Quiz (10 min)
Method: Peer Teaching & Gamification

- Conduct a quiz (MCQs or case-based questions).
- Encourage students to explain concepts to peers.
- Address common doubts.

		5. Conclusion & Reflection (5 min) Method: Summary Discussion • Teacher reinforces key concepts. • Ask students: “How will you explain RCT to a patient?”

Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**

Topic 51 Dravyas used in Karna Nasa Mukha Roga Chikitsa-1 (LH :1 NLHT: 0 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO5	Elucidate Common Dravyas used in Karna Nasa Mukha Roga- Antibiotics, PPIs, Steroids, Antihistamines, Nasal Decongestants, and Anesthetic drugs.	CC	DK	KH	L	INT,O-QZ, P-EXAM,VV-Viva,PUZ	F&S	II	-	LH
CO5, CO7	Describe Samanya Yoga (Drugs) used in Karna Nasa Mukha Roga.	CC	DK	KH	D,DA,L &GD,DIS,CBL	COM,CBA, Log book,INT,P-ID	F&S	II	V-DG	NLHP51.1

Non Lecture Hour Theory		
S.No	**Name of Activity**	**Description of Theory Activity**
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**

NLHP 51.1	Contemporary Pharmaceutical Agents Used in Karna Nasa Mukha Roga.	1. Introduction (10 min) • Brief overview of pharmacological agents used in Karna Nasa Mukha Roga (ENT disorders). • Explain classification & mode of action of: ◦ Antibiotics (Amoxicillin, Cephalosporins, Macrolides, Fluoroquinolones, Aminoglycosides). ◦ PPIs (Rabeprazole, Esomeprazole, Omeprazole). ◦ Steroids (Fluticasone, Glucocorticoids). ◦ Antihistamines (Cetrizine, Bilastine, Fexofenadine). ◦ Nasal Decongestants (Ephedrine, Oxymetazoline). 2. Group Activity - Case-Based Discussion (20 min) Method: Problem-Based Learning (PBL) • Divide students into 5 groups, each assigned a case involving drug use in ENT disorders. • Cases provided: ◦ Group 1: Bacterial sinusitis – Choice of antibiotics, dosage, resistance issues. ◦ Group 2: GERD-associated chronic cough – Role of PPIs, adverse effects. ◦ Group 3: Allergic rhinitis – Use of steroids & antihistamines, comparison of nasal sprays. ◦ Group 4: Acute otitis media – Indications for antibiotics vs. observation. ◦ Group 5: Nasal congestion – Benefits & risks of decongestants. • Each group discusses their case and presents findings. 3. Practical Demonstration (15 min) Method: Hands-on Drug Identification & Prescription Writing • Display different drug formulations (tablets, syrups, nasal sprays).

		• Teach students how to read labels, identify active ingredients, and understand dosing instructions. • Practice prescription writing for each drug category based on case discussions. 4. Q&A and Conclusion (10 min) • Interactive Q&A session to clarify doubts. • Recap of key learning points. • Discuss Ayurvedic alternatives for symptom relief 5. Recording the Activity in the Journal or Clinical Record • Each student must document the session in their journal or clinical record, including: ◦ Summary of case discussions and key takeaways. ◦ Drugs discussed, their indications, dosages, and possible side effects. ◦ Observations from practical demonstrations (drug identification, prescription writing, etc.). ◦ Personal reflections on learning outcomes and areas for improvement. • The journal entry should be reviewed and signed by the faculty as part of assessment.

Topic 52 Karnarsha and Karnarbuda (LH :1 NLHT: 0 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5, CO6	Describe Samprapti, Lakshanas, and Chikitsa of Karnarsha and Karnarbuda.Discuss the Etiology, Pathology, Clinical features, and Medical and Surgical management of Aural Polyp.Enlist indications for referral in these conditions.	CC	MK	KH	L&PPT ,L	DEB,T-OBT,QZ	F&S	III	H-SH	LH

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**

Topic 53 Karnasandhana (LH :1 NLHT: 1 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO3, CO5	Describe Karnasandhana; its Indications, Contraindications, Types, Purva-Pradhana-Pashchat Karma and Complications.	CC	MK	KH	L&PPT	T-CS,M-CHT,T-OBT	F&S	III	-	LH
CO3, CO4, CO5	Elaborate on Indications, Contraindications, and Surgical procedures of Auroplasty.	CC	DK	KH	SIM,FC,D-M,PBL,L_VC	C-VC,OSCE,CL-PR,QZ ,M-POS	F&S	III	-	NLHT53.1

Non Lecture Hour Theory		
S.No	**Name of Activity**	**Description of Theory Activity**
NLHT 53.1	Purva-Pradhana-Pashchat Karma for Karnasandhana (Auroplasty).	Karnasandhana (60 mins) A) The teacher may- Use anatomical models, diagrams, and 3D animations to illustrate surgical procedures. (10 mins) Show recorded surgical procedures to give students a realistic view of the process. Pause at key moments to explain important steps. Explain each step thoroughly, including the rationale behind each action. (15 mins) Provide students with procedural checklists to help them remember the steps and ensure nothing is missed. (10 mins) OR B) The teacher may use Virtual Reality or surgical simulators to provide hands-on practice in a controlled, risk-free environment. OR

		C) Have students role-play as surgeons, assistants, or scrub nurses to practice different aspects of the procedure.(10mins) D) Encourage students to ask questions and discuss the procedure as it unfolds. Foster a collaborative learning environment. (5mins) E) The teacher should Include scenarios where complications arise and teach students how to manage these situations. F) Provide access to reputable online resources and journals for further reading and research. G) Use quizzes, written exams, and OSCEs to evaluate students' understanding and skills. (5 mins) H) Provide constructive feedback on their performance, highlighting areas of improvement and excellence. I) Stress the importance of patient safety, aseptic techniques, and surgical hygiene. J) Discuss ethical issues related to surgery, including informed consent, patient confidentiality, and decision-making. (5 mins)

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity

Topic 54 Bhraamara (Vertigo) (LH :1 NLHT: 1 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Describe Etiology, Pathology, Clinical Features and Management of Labyrinthitis.Describe the Etiology, Pathology, Clinical Features, and Medical and Surgical Management of Meniere's Disease.	CC	DK	KH	L&PPT ,L	CL-PR,QZ ,T-OBT	F&S	III	-	LH
CO1, CO2, CO3, CO4, CO5,	Describe Etiology, Pathology, Clinical Features and Management of Benign Paroxysmal Positional Vertigo (BPPV)	CC	DK	KH	L&GD, ML,FC, L&PPT ,PER	M-POS,DO AP,CL-PR,QZ ,T-OBT	F&S	III	-	NLHT54.1

CO6										
CO2, CO3, CO4, CO5, CO7	Present an appropriate history in a patient presenting with Bhraamara (Vertigo).	AFT-RES	DK	SH	PER,PBL,PT,TUT,D-BED	P-EXAM,DEB,PP-Practical,M-CHT,VV-Viva	F&S	III	-	NLHP54.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 54.1	Etiology, Pathology, Clinical Features and Management of Benign Paroxysmal Positional Vertigo (BPPV)	Benign Paroxysmal Positional Vertigo (BPPV) (60 mins) A) Teacher will form four study groups to discuss and share information, each for Etiology, Pathology, Clinical Features and Management of Benign Paroxysmal Positional Vertigo (BPPV). Students will be encouraged to go to the library (pre-class) and ask Librarian's help. Each group will then present in front of the entire classroom (10 mins each group) Teacher should discuss the relation between Bhraamara and BPPV. (5mins) Teacher should Brainstorm the reasons and treatment modalities. (5mins) B) Student should be able to diagnose and perform various clinical maneuvers like Epliey maneuver under the guidance of the Clinician using Roleplay. (10mins) C) Evaluate the student's performance on the basis of their presentations, quizzes, and practical demonstration, observation, assistance and performance.

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 54.1	Case discussion on Bhraamara (Vertigo).	A) Teacher should teach students the proper way of case taking which starts with students introducing himself/herself to the patient. Student should then make patients comfortable and inform patient what he/she is going to do for case-taking purpose. Student should then take proper history of the patient and present a differential diagnosis of Vertigo in

		front of the class. Student should finally come to proper diagnosis and should be able to describe its Management and prognosis. OR B)Teacher should have students shadow experienced clinicians during patient history taking to observe best practices and techniques and facilitate post-shadowing discussions. OR C) Students should utilize advanced simulation technology to create realistic patient scenarios. Teacher should engage students with virtual patient software that simulates real-life scenarios, helping them practice history-taking and clinical reasoning skills. OR Teacher can use standardized patients(actors or fellow students)to role-play patients D) Students can be recommended apps like Geekymedics that offer virtual practice and quizzes on history-taking skills. E) Students should be able to demonstrate different Tests for Equilibrium. F) The students must be assessed based on their anatomical knowledge, clinical findings, and understanding of the underlying pathology and its management.

Topic 55 Agantuja Shalya in Karna (LH :0 NLHT: 1 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO5, CO7	Present a case with Agantuja Shalya in Karna (Foreign Body in Ear) and its management.	AFT-RES	DK	SH	PBL,DIS,CD,D-M,TBL	DOPS,P-EXAM,P-CASE,DOPS,P-PRF	F&S	III	-	NLHP55.1
CO2, CO5	Describe Types, Clinical features and method of removal of Agantuja Shalya (Foreign Body) in Ear.	CC	DK	KH	TUT,L&PPT , PT,L_VC,TBL	P-CASE,CL-PR	F&S	III	-	NLHT55.1

Non Lecture Hour Theory		
S.No	**Name of Activity**	**Description of Theory Activity**
NLHT 55.1	Techniques for removal of Agantuja Shalya (Foreign Body) from Ear..	Foreign Body in Ear (60 mins) Teacher should teach students different types of Foreign Bodies in ear. (10 mins) Teacher can show various Videos related to various techniques related to the removal of Foreign Bodies (10 mins) Teacher should demonstrate proper technique of removal of Foreign Body to students. (15 mins) Students will be divided into four groups and different foreign bodies like hygroscopic, non-hygroscopic, living and non-living will be allotted to them. Students will be given 5 minutes to prepare and will be directed to present their findings in front of the entire class (5 minutes for each group) Assessment of students will be done on presentation.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 55.1	Case discussion on Agantuja Shalya in Karna (Foreign Body in Ear).	A)Teacher should present a clinical case of Agantuja Shalya in Karna (Foreign Body in Ear). and have students work in groups to gather history, discuss differential diagnoses, and plan management.. Teacher should have students shadow experienced clinicians during patient history taking to observe best practices and techniques and facilitate post-shadowing discussions. Student should be able to elicit differences between living/non-living, Hygroscopic/ Non Hygroscopic foreign bodies and ways to deal with them. OR B) Teacher can utilize advanced simulation technology to create realistic patient scenarios. Helping them practice history-taking and clinical reasoning skills. C) Teacher can break students into small groups for more focused practice and individualized feedback. D) Teacher should walk students through the removal procedure step-by-step, explaining the purpose and technique of each step.

		E)Teacher should teach students about post-operative care, including monitoring for complications and managing patient recovery. F) Students can be assessed by DOPS.

Topic 56 Nasarsha (LH :1 NLHT: 1 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO3, CO5	Describe types, etiology, clinical features, differential diagnosis, investigations, and medical treatment of Nasarsha (Nasal Polyps).	CC	MK	KH	TUT,BL ,L&PPT	T-OBT,VV -Viva,CL-PR,QZ	F&S	III	-	LH
CO5	Expound surgical treatment of Nasal Polyps. (FESS surgery-indications, contraindications, type of anesthesia, major surgical steps, post-operative care, complications and their management in brief)	CC	DK	KH	L_VC, ML	CHK,VV-Viva,QZ	F&S	III	-	NLHT56.1
CO3, CO4, CO7	Present an appropriate history in a patient presenting with Nasa-avarodha.	AFT-RES	MK	KH	CD,PBL ,RP	Mini-CEX, P-VIVA,P-EXAM,OS PE,OSCE	F&S	III	-	NLHP56.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 56.1	Surgical treatment of Nasarsha (Nasal Polyps).	The teacher may- A) Use anatomical models, diagrams, and 3D animations to illustrate surgical procedures. (35 min.) OR A) Show recorded surgical procedures to give students a realistic view of the process. Pause at key moments to explain important steps. Explain each step thoroughly, including the rationale behind each action. (35 min.) Provide students with procedural checklists to help them remember the steps and ensure nothing is

		missed. (05 min.) B) Encourage students to ask questions and discuss the procedure as it unfolds. (05 min.) C) The teacher should Include scenarios where complications arise and teach students how to manage these situations. D) Stress the importance of patient safety, aseptic techniques, and surgical hygiene. E) Discuss ethical issues related to surgery, including informed consent, patient confidentiality, and decision-making. F) Describe when to seek an expert opinion, and when to refer for surgery. G) Provide access to reputable online resources and journals for further reading and research. H) Use quizzes, and open-book texts to evaluate students' understanding and skills. (10 min.) I) Provide constructive feedback on their performance, highlighting areas of improvement and excellence. (03-05 min.)
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 56.1	Evaluation of Nasa-avarodha. Evaluation of Nasarsha (Nasal polyp).	Evaluation of Nasa-avarodha-(50 min.) A)Present a clinical case of nasal obstruction and have students work in groups to gather history, discuss differential diagnoses, and plan management. Encourage students to teach each other history-taking techniques, which reinforces their learning and builds confidence. Have students shadow experienced clinicians during patient history taking to observe best practices and techniques and facilitate post-shadowing discussions. OR B) Use standardized patients(actors or fellow students)to role-play patients with nasal obstruction. C) Break students into small groups for more focused practice and individualized feedback. D) Recommend apps like Geekymedics that offer virtual practice and quizzes on history-taking skills. E) Have students keep reflective journals where they document their experiences, challenges, and learning points from taking patient histories. F) To assess the performance, use Mini-CEX (Mini Clinical Evaluation Excercise).

- Observe a Student’s interaction with a patient in a real-world clinical setting.
- Rate the performance in areas like history taking, physical examination, and counseling skills.

- The student receives immediate feedback from the teacher.

OR
Conduct OSCEs where students rotate through stations to practice history taking and receive immediate feedback. (10 min.)
OR
G)Encourage students to assess their own performance and identify areas for improvement.
Surgical and/or para surgical procedures for Nasarsha (50 min.):-
1. Introduction (5 minutes)- Explain the importance of understanding nasal polyp surgery and its impact on patient care.
2. Overview of Nasal Polyps (10 minutes) - Definition and Symptoms, Diagnosis -the diagnostic tools and methods used to identify nasal polyps.
3. Surgical Procedure (20 minutes)
- Preoperative Preparation (5 minutes): Describe the steps taken before surgery, including patient preparation and anesthesia.
- Surgical Technique (10 minutes): Explain the surgical technique, including the use of endoscopes, micro-debriders, and other instruments.
- Postoperative Care (5 minutes): Discuss the immediate postoperative care, including monitoring and managing potential complications.
4. Interactive Demonstration (10 minutes)
- Live Demonstration or Video (5 minutes): Show a live demonstration or a video of the surgical procedure.
- Hands-On Practice (5 minutes): Allow students to practice on models or simulators, if available.
5. Q&A and Discussion (5 minutes)
- Q&A Session (3 minutes): Allow students to ask questions and clarify any doubts.

		- Discussion (2 minutes): Summarize key points and encourage students to share their thoughts and experiences. 6. To assess, use OSCE covering steps of procedures, focusing on evaluating student's understanding of anatomy, surgical techniques, decision-making, patient management, and appropriate response to complications.

Topic 57 Nasagata Raktasrava (LH :1 NLHT: 1 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Enlist the causes of Nasagata Raraktasrava.Describe Hetus, Samprapti, Lakshanas and Chikitsa of Urdhwaga (Nasagata) Raktapitta.Describe Etiology, Types, Clinical Features, Differential Diagnosis, and Investigations of Epistaxis.	CC	MK	KH	L&PPT	T-OBT,S-LAQ,VV-Viva	F&S	III	-	LH
CO5	Describe Management of Nasagata Raktasrava (Epistaxis).	CC	MK	KH	L_VC,D-M,RP	P-MOD,VV-Viva,T-OBT	F&S	III	-	NLHT57.1
CO3, CO5, CO6	Present cases with Nasagata Raktasrava.Summarise the steps involved in the Atyayika Chikitsa in Nasagata Raktasrava (Anterior epistaxis).	AFT-RES	MK	SH	D-M,D-BED,PBL	360D,P-VIVA,OSCE	F&S	III	-	NLHP57.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 57.1	Management of Nasagata Raktasrava (Epistaxis).	The student will learn management, including basic first aid, through interaction and role play. (30 min.) (A)The students will be divided into four groups. Each group will be given a topic as - a) Ayurvediya management,b) Basic first aid. c) Anterior nasal packing. d) Posterior nasal packing. Assign roles to students, such as the patient, the primary care provider, a nurse, and an observer. Rotate roles to ensure each student gets to practice different aspects of management.

		Give clear instructions and guidelines for the role-play scenarios, including the symptoms and history of the patient with epistaxis. Role Play Scenarios: Scenario 1: Initial Assessment and First Aid Scenario 2: Persistent Bleeding and Nasal Packing Scenario 3: Post-Procedure Care and Follow-Up Encourage students to act out their roles as realistically as possible, using appropriate medical terminology and patient interactions. Allow students to ask questions and discuss their actions during the role play. Group Discussion- (20 min.)After each scenario, conduct a debriefing session where students can discuss their experiences, challenges, and what they learned. Provide constructive feedback on their performance. Encourage students to reflect on their own performance and identify areas for improvement. (B) Use video demonstrations of epistaxis management to complement role-playing and provide visual aids for students. (C) Use open book test to assess. OR ask students to demonstrate on model to evaluate the understanding of students in the following manner:- ◦ Observe a Student’s interaction with a virtual patient in the form of model. ◦ Rate the performance in areas like physical examination, counseling skills, and procedural skills. ◦ The student receives immediate feedback from the teacher.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 57.1	Evaluation of Nasagata raktasrava (Anterior epistaxis).	A)Present a clinical case of Nasagata Raktasrava and have students work in groups to gather history, discuss differential diagnoses, and plan management. Have students shadow experienced clinicians during patient history taking to observe best practices

		and techniques and facilitate post-shadowing discussions. Allow them to observe the correct technique of emergency management of anterior epistaxis including anterior nasal packing. Allow students to practice the procedure on simulation models or cadavers under supervision. Provide access to instructional videos for further learning. Understand the referral indications and procedure. OR B) Utilise advanced simulation technology to create realistic patient scenarios. Engage students with virtual patient software that simulates real-life scenarios, helping them practice history-taking and clinical reasoning skills. C) Break students into small groups for more focused practice and individualized feedback. D) Recommend apps like Geekymedics and Wikimeds that offer virtual practice and quizzes on history-taking skills. E) Have students keep reflective journals where they document their experiences, challenges, and learning points from taking patient histories. F) Conduct OSCEs where students rotate through stations to practice history taking and receive immediate feedback. • OSCE stations to have signs of General examination, local examination, psychomotor skills, communication skills and history taking. The assessor should use checklists to evaluate students' performance in a reliable and consistent way. OR G) 360-degree assessment can be used for evaluating, it includes responses from assessor and peers, obtained through standard checklists, throughout the process of case taking. The format can be modified from:- https://abpn.org/wp-content/uploads/2024/04/ABPN-360-Degree-Evaluation-Feedback-Form.pdf

Topic 58 Nasarbuda (LH :1 NLHT: 1 NLHP: 2)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO2, CO5	Describe Lakshanas and Chikitsa of Nasarbuda.Describe Etilogical classification and Clinical Features of Tumors of the nose and paranasal sinuses. (Rhinophyma and Squamous cell Ca)	CC	DK	KH	L,L&PPT	VV-Viva,QZ ,CL-PR,T-OBT	F&S	III	-	LH
CO2, CO5	Describe investigations and treatment for Nasarbuda- Tumors of nose and paranasal sinuses. (Rhinophyma and Squamous cell Ca).	CC	DK	KH	FC,DIS, PER	M-POS,CL-PR	F&S	III	-	NLHT58.1
CO3, CO4, CO7	Present an appropriate history in a patient presenting with Gandhajnana Vikruthi (Anosmia, Hyposmia, Parosmia).	AFT-RES	MK	KH	RP,D-BED,PBL	OSCE,VV-Viva,Mini-CEX	F&S	III	-	NLHP58.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 58.1	Nasarbuda- Tumors of nose and paranasal sinuses.	(A) Teacher will form four study groups to discuss and share information, each for investigations and treatment of Rhinophyma and investigations and treatment of Squamous cell Ca. Encourage students to discuss with peers, subdivide subtopics amongst themselves and split time between different activities like searching for articles, reading and taking notes, review each other's notes and findings to ensure accuracy and comprehensiveness. Let them present in classrrom. (10- 12 min.for each group) Make them specify indications and procedure for referrral. OR (A)Use the method of Flipped Classroom.The students will be given a link to a PowerPoint presentation on Nasarbuda.The presentation on the topic should be prepared and uploaded on a website created for the students or free cross -platform messaging services like Whatsapp or Telegram or google clasroom.They should be given 1 week time before the scheduled FCR for this topic. Let them present in classrrom. (10- 12 min.for each group).

		At the end of session, summarize what they have learned and plan what to do next. (10 min.) (B) Evaluate the student's performance during class presentation or asking them to make posters. During class discussions, pay attention to student participation, level of curiosity, and willingness to ask questions; Encourage students to reflect on their learning process and identify areas where they need further support; Review and re-solve the problems they get wrong. It is preferable to provide a self-evaluation quiz.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 58.1	Evaluation of Gandhajnana Vikruthi (Anosmia, Hyposmia, Parosmia).	A)Present a clinical case of Gandhajnana Vikruthi and have students work in groups (4 to 6 students in each group) to gather history, discuss differential diagnoses, and plan management. Encourage students to teach each other history-taking techniques, which reinforces their learning and builds confidence. Have students shadow experienced clinicians during patient history taking to observe best practices and techniques and facilitate post-shadowing discussions. OR B) Use standardized patients(actors or fellow students)to role-play patients with Gandhajnana Vikruthi. C) Break students into small groups for more focused practice and individualized feedback. D) Recommend apps like Geekymedics and Wikimeds that offer virtual practice and quizzes on history-taking skills. E) Have students keep reflective journals where they document their experiences, challenges, and learning points from taking patient histories. F) Conduct OSCEs where students rotate through stations to practice history taking and receive immediate feedback. • OSCE stations to have signs of General examination, local examination, psychomotor skills, communication skills and history taking of a particular examination. The assessor should use

checklists to evaluate students' performance in a reliable and consistent way.

- Communication skills to be assessed by Kalamazoo essential elements communication checklist.

OR
F) Use Mini-CEX.

- Observe a Student’s interaction with a patient in a real-world clinical setting.
- Rate the performance in areas like history taking, physical examination, and counseling skills.

- The student receives immediate feedback from the teacher.

G) Encourage students to assess their own performance and identify areas for improvement.

Topic 59 Agantuja Shalya in Nasa (LH :1 NLHT: 0 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Describe aetiology and types ,Clinical Features, Common locations ,Complications, Radiological investigations and Treatment for Foreign Body in nose.	CC	MK	KH	L,L&PPT	P-POS,QZ ,T-OBT	F&S	III	-	LH
CO3, CO5, CO7	Describe the etiology and types of Agantuja Shalya (Foreign Body) in Nasa (nose), and their Clinical Features, Common locations and complications, investigations, and treatment.	CC	MK	KH	TUT,X-Ray,CD ,SIM	P-EXAM,PP-Practical, P-VIVA	F&S	III	-	NLHP59.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 59.1	Case discussion on Agantuja Shalya in Nasa(nose).	To examine the foreign bodies in the nose and their removal, in Yogya Lab or in the OPD under supervision. (A)Present a real-life clinical scenario of the nasal foreign body to the students; or use a model in Yogya lab. Students discuss the problem in small groups, identifying what they know and what they need to learn. Encourage students to identify Foreign bodies in X-rays. Walk students through the removal procedure step-by-step, explaining the purpose and technique. Foster an environment where students feel comfortable asking questions and seeking clarification. Teach students about post-procedure care, including monitoring for complications and managing patient recovery. Record procedure(with patient consent) for educational purposes. Reviewing these videos can help students learn and improve. Provide continuous feedback to students on their performance, encouraging reflection and improvement. OR B) Use a low-tech simulator model like a cardboard box or SOSO-NOSO simulator. Conduct a debriefing session to discuss challenges and areas for improvement. C)Use quizzers or 360 d direct observations to assess.

Topic 60 Nasa-abhighata, Nasasandhana (LH :1 NLHT: 0 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO3, CO5	Narrate Etiology, Types, Clinical Features, Complications, Investigations, and Treatment of Nasal Trauma including Fracture Nasal Bone.	CAP	MK	KH	L,L&PPT	P-VIVA,T-CS	F&S	III	H-SH	LH

CO5, CO6	Summarise the steps involved in Nasasandhana Vidhi as explained by Sushruta.	CC	MK	KH	SIM,TUT,D-M	CHK,P-EXAM,M-CHT,DOPS,DOPS	F&S	III	-	NLHP60.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 60.1	Details in Nasasandhana Vidhi.	A) Observe the Nasasandhana Vidhi on models or patients. To do the Nasasandhana Vidhi on models use simple materials like Foam, Rubber or silicon models. Define clear objectives of the procedure. Break down the surgical procedure into manageable smaller steps. B) Record videos and play it to revise. C) Emphasize ethical and professional considerations. D) To assess, use OSCE covering steps of procedures, focusing on evaluating student's understanding of anatomy, surgical techniques, decision-making, patient management, and appropriate response to complications.

Topic 61 Talugata Roga (LH :2 NLHT: 1 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Describe the Aetiology, Clinical features, and treatment of Galashundika, Tundikeri, Kacchapa (Tumours of the palate), Uvulitis, and Gilayushotha (Tonsillitis).	CC	DK	KH	L&PPT,L	CL-PR,QZ,COM,M-POS	F&S	III	-	LH
CO2, CO5	Describe the Clinical features of Talu-Arbuda.Describe the Clinical Features and Treatment of Talushosha and Talupaaka.	CC	DK	KH	DIS,L&PPT,PL	QZ ,M-POS,PRN	F&S	III	-	NLHT61.1

Non Lecture Hour Theory		
S.No	**Name of Activity**	**Description of Theory Activity**
NLHT 61.1	Discussion on Talu-Arbuda, Talushosha, Talupaka.	1. Pre-Class Activity (Preparation) – (Before the Session) • Students are provided with reading materials or video links on: ◦ Arbuda (Tumors) – Types, characteristics, clinical features. ◦ Talushosha & Talupaaka – Definitions, pathophysiology, symptoms, Ayurvedic and contemporary management. • Students review the materials at home and prepare notes. 2. In-Class Activity – 55 Minutes A) Group-Based Learning (20 min) • Divide students into 3 groups to discuss: 1. Arbuda – Clinical features, types (Vataja, Pittaja, Kaphaja, Mamsaja, etc.), differential diagnosis. 2. Talushosha – Symptoms, causes, risk factors, correlation with modern conditions (Palatal atrophy, Sjögren's syndrome). 3. Talupaaka – Clinical features, inflammation process, management strategies. • Each group presents their findings (5 min per group). • Teacher moderates, corrects misconceptions, and highlights key points. B) Case-Based Discussion (15 min)

		• Teacher presents clinical case scenarios: ◦ A patient with a hard, immobile swelling (Arbuda) – Students analyze possible diagnosis & discuss management. ◦ A patient with palatal dryness & ulceration (Talushosha & Talupaaka) – Students suggest Ayurvedic and contemporary treatment approaches. C) Concept Reinforcement (10 min) • Comparative discussion of Ayurveda and modern medical perspectives. • Quick Quiz – Rapid-fire Q&A to assess understanding. 3. Post-Class Activity (Journal Entry & Reflection) – (After the Session) • Students document key takeaways in their journal/clinical record, including: ◦ Clinical features & treatment approaches discussed. ◦ Case discussions & differential diagnoses. ◦ Personal reflections on how Ayurveda can address these conditions. • Faculty reviews and provides feedback.

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity

Topic 62 Kantharoga (LH :4 NLHT: 2 NLHP: 6)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO4	Define Kantharoga and explain the Etiology, Clinical features and treatment of Vataja Rohini, Pittaja Rohini, Kaphaja Rohini, Sannipataja Rohini, and Raktaja Rohini.	CC	DK	KH	L&PPT ,L	OSCE,VV-Viva,S-LAQ	F&S	III	-	LH
CO2,	Describe Etiology, Clinical Features and Treatments of	CC	DK	KH	L&PPT	OSCE,PRN	F&S	III	-	LH

CO5	Ekavrunda, Vrunda, Gilayu, Galavidradhi (peritonsillar abscess), Mamsatana and Vidari.				,L					
CO2, CO3, CO5, CO7	Present the case of a patient presenting with Geelana-Shoola (Odynophagia), Geelana-kashta (Dysphagia), and Mukha Dourgandhya (Halitosis).	AFT-RES	DK	SH	D,L&GD,CBL	P-EXAM,P-VIVA,CBA,OSCE	F&S	III	-	NLHP62.1
CO2, CO3, CO5, CO7	Present cases of Ekavrunda, Vrunda (Pharyngitis), Gilayu, Galavidradhi, Rohini and Kanthashalooka.	AFT-RES	DK	SH	TUT,PBL,D-BED	OSCE,P-ID,CL-PR,C-VC,P-CASE	F&S	III	-	NLHP62.2
CO2, CO3, CO5, CO7	Present an appropriate history in patients presenting with Swarabheda (Hoarseness of voice) and Kantha Koojana (Stridor).	AFT-RES	DK	SH	D-BED,TBL,CBL,TUT,CD	P-RP,P-EXAM,Mini-CEX,OSCE	F&S	III	-	NLHP62.3
CO2, CO3, CO5	Explain Parotitis.	CC	NK	KH	PBL,L&GD	CL-PR,QZ,VV-Viva	F&S	III	-	NLHT62.1
CO2, CO5	Explain the etiology, clinical features, and treatment of Galavidradhi. (Peritonsillar abscess, Paratonsillar abscess, Para and Retropharyngeal abscess)	CC	DK	KH	L&GD,FC	P-EXAM,QZ,PRN	F	III	-	NLHT62.2

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 62.1	Etiology, clinical features and treatment of Parotitis.	1. Introduction (5 min) • Briefly introduce Parotitis as inflammation of the parotid gland and its classification

		2. Case-Based Group Discussion (25 min) Divide students into 3 groups, each discussing a different clinical presentation of parotitis: Each group presents their discussion (3-5 min each), while faculty guides clinical reasoning. 3. Concept Mapping Activity (15 min) • Students create a visual concept map linking causes, symptoms, diagnosis, and management of parotitis. • Faculty adds Ayurvedic correlations, 4. Summary & Documentation (10 min) • Summarize key learning points and integrate Ayurvedic vs. modern approaches. Students document findings in a clinical journal, including: • Differential diagnosis • Modern & Ayurvedic treatment plans • Preventive aspects (oral hygiene, hydration, immunity-boosting drugs like Guduchi, Yashtimadhu, etc.)
NLHT 62.2	Group Discussion on Galavidradhi.	A) Pre-Class Activities (Self-Learning Phase) – 1 Week Before • Provide Learning Materials: ◦ Share a PowerPoint presentation on Galavidradhi (Google Classroom/WhatsApp/Telegram). ◦ Recommend textbook readings for deeper understanding.

- Encourage self-study before the session.
- Preparation for Discussion:
  - Students form small groups and discuss the topic among themselves.
  - Clarification of doubts via messaging platforms before the class.

B) In-Class Activities (55 Minutes Flipped Classroom Session)
1. Introduction & Quiz (10 min)

- Quick recap of Galavidradhi (Peritonsillar, Paratonsillar, Para- & Retropharyngeal Abscess).
- Conduct a short quiz (MCQs or case-based) to assess prior learning.

2. Student Presentations (45 min)
Each group presents for 15 minutes:

- Group 1: Peritonsillar abscess (15 min)
- Group 2: Paratonsillar abscess (15 min)
- Group 3: Para- & Retropharyngeal abscess (15 min)

During each presentation:

- Encourage peer discussion and critical thinking.
- Facilitate Q&A to clarify concepts.

C) Assessment & Feedback

- Evaluate students’ performance based on:

		◦ Presentation skills (clarity, organization, engagement). ◦ Depth of knowledge (clinical features, diagnosis, treatment). ◦ Response to Q&A and quiz results. • Provide constructive feedback for improvement. •
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 62.1	Cases of Geelana-Shoola (Odynophagia), Geelana-Kashta (Dysphagia), and Mukha Dourgandhya (Hallitosis).	1. Introduction (5 min) • Brief explanation of the conditions: ◦ Geelana-Shoola (Odynophagia) – Pain while swallowing. ◦ Geelana-Kashta (Dysphagia) – Difficulty in swallowing. ◦ Mukha Dourgandhya (Halitosis) – Bad breath, its causes & impact. • Clinical relevance – Correlation with modern conditions (Tonsillitis, GERD, Oral infections, etc.). 2. Case-Based Group Activity (30 min) • Divide students into 3 groups, each assigned one condition. • Each group is given a case scenario to discuss and analyze: ◦ Case 1 (Odynophagia): A patient with throat pain while swallowing, fever, and inflamed tonsils. ◦ Case 2 (Dysphagia): A patient with difficulty swallowing, weight loss, and long-term acid reflux history. ◦ Case 3 (Halitosis): A patient with persistent bad breath despite regular oral hygiene. • Tasks for each group: 1. Identify probable causes (Ayurvedic & modern perspectives).

		2. Discuss pathophysiology and Samprapti. 3. Suggest diagnostic approaches and treatment options (Ayurvedic & contemporary). 3. Practical Demonstration (15 min) • Examination techniques: ◦ Inspection of oral cavity & throat using a torch and tongue depressor. ◦ Palpation of lymph nodes for signs of infection. ◦ Assessment of swallowing difficulty using simple bedside tests. • Discussion on treatment strategies: ◦ Ayurvedic Kavala, Gandusha, and Pratisarana. ◦ Importance of dietary & lifestyle modifications. ◦ Herbal formulations & modern pharmacology. 4. Recording in Clinical Journal (5 min) • Each student documents key learnings in their clinical record, including: ◦ Summary of cases discussed. ◦ Examination findings & differential diagnosis. ◦ Ayurvedic & modern treatment approaches. ◦ Reflections on clinical relevance and learning experience. • Faculty reviews & provides feedback.
NLHP 62.2	Case-based discussion on Kantharoga.	1. Introduction (5 min) • Brief overview of the conditions: ◦ Ekavrunda & Vrunda (Pharyngitis) – Inflammation of the pharynx, causes, and symptoms. ◦ Gilayu – Swelling of the tonsils, correlation with tonsillitis.

			◦ Galavidradhi – Deep-seated abscess in the throat region, correlation with retropharyngeal abscess. ◦ Rohini – Ulcerative lesions in the throat, possible correlation with diphtheria or severe aphthous ulcers. ◦ Kanthashalooka – Foreign body sensation in the throat, possible correlations with GERD or globus pharyngeus. 2. Case-Based Group Activity (30 min) • Divide students into 3 groups, each assigned two conditions. • Provide clinical case scenarios for discussion: ◦ Case 1 (Pharyngitis & Gilayu): A patient presents with sore throat, fever, and difficulty swallowing. ◦ Case 2 (Galavidradhi & Rohini): A patient with throat swelling, pus discharge, and severe difficulty in speaking/swallowing. ◦ Case 3 (Kanthashalooka & Differential Diagnoses): A patient complains of a persistent foreign body sensation in the throat. • Tasks for each group: 1. Discuss possible etiologies (Ayurvedic & modern). 2. Identify pathophysiology & Samprapti. 3. Suggest examination methods and treatment approaches (Ayurvedic & contemporary). 3. Clinical Examination & Demonstration (15 min) • Practical demonstration of examination techniques: ◦ Inspection of the throat, tonsils, and oral cavity using a torch and tongue depressor. ◦ Palpation of cervical lymph nodes for signs of infection. ◦ Demonstration of simple bedside swallowing tests. • Discussion on treatment approaches:

		◦ Ayurvedic Kavala, Gandusha, Pratisarana, and Lepa. ◦ Importance of diet & lifestyle modifications. ◦ Use of Ayurvedic and modern medications for infection and inflammation. 4. Recording in Clinical Journal (5 min) • Students document the session in their clinical record, including: ◦ Summary of cases discussed. ◦ Clinical features & differential diagnosis. ◦ Examination findings & practical learnings. ◦ Ayurvedic & modern treatment approaches. ◦ Reflections on clinical relevance and observations. • Faculty reviews and provides feedback.
NLHP 62.3	Case Discussion on Swarabheda and Kantha Koojana.	1. Introduction (5 min) • Brief overview of Swarabheda (Hoarseness) and Kantha Koojana (Stridor): ◦ Swarabheda: Altered voice quality due to laryngeal pathology (e.g., laryngitis, vocal cord nodules, neurological causes). ◦ Kantha Koojana (Stridor): High-pitched breathing sound due to airway obstruction (e.g., laryngeal edema, foreign body, tumors). • Importance of history-taking in differentiating benign vs. serious conditions. 2. Case-Based Role-Play Activity (20 min) Students are divided into pairs (Doctor & Patient) and given case scenarios: • Case 1: Hoarseness due to Chronic Laryngitis ◦ Patient: A teacher with a history of voice strain, dry cough, and mild throat pain for 2

weeks.
    - Doctor: Ask relevant questions about duration, voice usage, and associated symptoms.
- Case 2: Hoarseness due to Vocal Cord Nodules
    - Patient: A singer with progressive hoarseness over months.
    - Doctor: Ask about professional voice use, lifestyle factors, and past medical history.
- Case 3: Acute Stridor Due to Laryngeal Edema
    - Patient: A child with sudden breathing difficulty and noisy breathing.
    - Doctor: Ask about recent infections, allergies, or possible foreign body aspiration.
- Case 4: Chronic Stridor Due to Laryngeal Tumor
    - Patient: A middle-aged smoker with progressive stridor and weight loss.
    - Doctor: Focus on risk factors, duration, and associated symptoms.

Each pair performs history-taking in front of the class while others observe and provide feedback.
3. Group Discussion & Analysis (20 min)
Faculty guides students to identify key aspects of history-taking:

- Onset & duration (Acute vs. chronic)
- Voice changes (Hoarseness, breathy, strained)
- Associated symptoms (Cough, pain, dysphagia, fever, weight loss)
- Risk factors (Smoking, allergies, vocal strain)
- History of infections, trauma, or systemic diseases
- Comparison of Ayurvedic and modern perspectives on causation and diagnosis.

4. Clinical Journal Documentation (10 min)

- Students record their findings from the role-play cases, including:

		◦ Chief complaints and history format. ◦ Differential diagnosis based on history clues. ◦ Ayurvedic Samprapti of Swarabheda and Kantha Koojana. ◦ Treatment approach – Ayurvedic & contemporary. • Faculty reviews entries and gives constructive feedback.

Topic 63 Dravyas used in Karna Nasa Mukha Roga Chikitsa-2 (LH :1 NLHT: 1 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO5	Describe the Use of the following drugs in Shiro Karna Nasa Mukha Roga:- • Laxmivilasa Rasa • Shirashuladi Vajra Rasa. • Tribhuvanakirti Rasa. • Guda Shunthi Nasyayoga. • Rasa Manikya. • Kshaara Taila • Discuss Research publications on recently proven drugs used in Shiro Karna Nasa Mukha Roga.	CC	DK	KH	L&PPT ,L,REC	P-EXAM, M-POS,VV -Viva,S-LAQ,COM	F&S	III	-	LH
CO5	Discuss Samanya Yogas used in Shiro Karna Nasa Mukha Roga.	CC	DK	KH	REC,L &GD,B L,PL	QZ ,P-VIV A,COM	F&S	III	-	NLHT63.1
CO5, CO7	Discuss prescription of Samanya Yogas used in Shiro Karna Nasa Mukha Roga.	CC	DK	KH	DIS	P-EXAM,P -CASE,SP, VV-Viva	F&S	III	V-RS,V-RS	NLHP63.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 63.1	Discussion on Samanya Yogas used in Shiro Karna Nasa Mukha Roga.	A) Pre-Class Activities (Self-Learning & Group Collaboration) • Sloka-Based Study: ◦ Students will be provided with relevant slokas from classical texts covering: ▪ Ingredients ▪ Pharmacological actions ▪ Indications and contraindications ◦ Each group will analyze one or more slokas related to their assigned yoga. • Familiarization with Easily Available Ingredients: ◦ Students will identify and collect samples of commonly available ingredients (e.g., Haritaki, Bibhitaki, Amalaki, Bilwa, Khadira, Vyosha, Tila Taila, etc.). ◦ They will observe, smell, and describe the characteristics of these ingredients. • Group Discussion & Compilation: ◦ Students work in groups (5–8 members) to: ▪ Translate and interpret the slokas. ▪ Extract therapeutic relevance in Shalakyatantra. ▪ Compare with contemporary formulations if applicable. ◦ Findings are compiled in notebooks or digital documents for in-class discussion. B) In-Class Activities (55 Minutes - Active Learning Session) 1. Group Presentation of Yogas (15 min) • Each group presents the sloka meaning, ingredient actions, and clinical relevance. • Faculty moderates and provides additional insights.

2. Ingredient Demonstration & Discussion (10 min)

- Groups will display and describe the ingredients they collected.
- Faculty will highlight key identification features and therapeutic properties.

3. Clinical Case Discussion (15 min)

- Present hypothetical or real cases where these yogas are applicable.
- Groups discuss dosage, administration method, and expected outcomes.

4. Critical Analysis & Debate (10 min)

- Debate on choosing specific yogas for similar conditions.
- Comparison with other Ayurvedic or modern interventions.

5. Summary & Takeaways (5 min)

- Teacher consolidates key points and assigns follow-up reading.

C) Evaluation of Student Compilation
Assessment Criteria

1. Interpretation Accuracy:
    - Correct translation and explanation of slokas.
2. Clinical Correlation:
    - Application of the yoga in Shalakyatantra.

		3. Ingredient Familiarization: ◦ Proper identification and description of easily available ingredients. 4. Completeness & Organization: ◦ Well-structured and comprehensive presentation. 5. Presentation & Engagement: ◦ Clarity in explaining concepts and interacting with peers.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 63.1	Common Yogas used in Shiro Karna Nasa Mukha Roga- their usage, indications, outcomes.	1. Ingredient Familiarization & Pharmacological Understanding (20 min) • Discuss the key ingredients of each Yoga. • Explain their mechanism of action in diseases of Shalakyatantra. • Compare their formulations with contemporary pharmacology where relevant. • Highlight any known pharmacological studies supporting their efficacy. 2. Prescription Analysis & Clinical Application (15 min) • Provide sample prescriptions containing these Yogas. • Students analyze the prescriptions, identify the ingredients, and justify their therapeutic use. • Discuss variations in dosage, anupana, administration route, and contraindications. 3. Group Discussion & Case-Based Learning (15 min) • Present real or hypothetical cases where these Yogas are used. • Students discuss and justify their choice of Yoga for each case. • Consider patient-specific factors (age, Dosha, severity, comorbidities) while selecting

		formulations. 4. Summary & Q&A Session (5 min) • Recap the key learnings of the session. • Allow students to clarify doubts and ask relevant questions.

Table 4 : NLHT Activity

(*Refer table 3 of similar activity number)

Activity No*	CO No	Activity details
1.1	CO1	Discussion on Netra Kriya Shareera in its Applied aspect.
1.2	CO1,CO2	Classification and Saama Nirama Lakshana of Netraroga.
2.1	CO5	Details of Aschyotana and Researches studies on Aschyotana, Seka, Pindi and Vidalaka.
2.2	CO5	Review of Research studies on Tarpana and Putapaka.
2.3	CO5	Discussion on Research studies on Anjana.
3.1	CO2,CO5	Indications and contraindications of Poorvakarma and Vamana, Virechana, Basti, Nasya,Raktamokshana In Netraroga.
4.1	CO5	Sanjnaharana in Netra (Anesthesia in Ophthalmology) -
6.1	CO2	Differential Diagnosis and causes of Epiphora and Hyperlacrimation.
8.1	CO3,CO5	Diagnostic Approaches to Eyelid Malposition: Entropion and Ectropion.
11.1	CO2,CO5	Discussion on Bhedana in Netraroga.
12.1	CO2,CO5	Procedure of Lekhana in Netraroga.
15.1	CO2,CO5	Comprehnsive discussion on Chhedana in Netraroga.
16.1	CO5	Discussion on Agnikarma and Ksharakarma in Netraroga.
19.1	CO3	Comprehension on uses of Dyes in Ophthalmology.
19.2	CO5	Discussion on Anti inflammatory agents and steroids used in ophthalmology.
19.3	CO5	Comprehension on Antibiotics ,antifungal agents, and antiviral agents used in ophthalmology.

19.4	CO2,CO5	Presentation on Lubricating agents and Artificial tears.
20.1	CO5	Eye banking- its organization, relevance and purpose.
20.2	CO5	Discussion on Eye donation.
20.3	CO5	Discussion on Keratoplasty.
20.4	CO2,CO5	Objectives, Organizational structure and New initiatives under National programme for Control of Blindness and Visual Impairment.
21.1	CO2,CO5	Management of Conjunctivitis.
22.1	CO2,CO5	Nidana and Chikitsa of Pillaroga.
23.1	CO5	Surgical Procedures for Glaucoma.
24.1	CO5	Kaphaja Linganasha Shastrakarma.
26.1	CO2,CO5	Surgical management of Senile Cataract and current research studies on Kaphaja Linganasha/Timira (Cataract).
28.1	CO5	Mydriatics and Cycloplegic agents.
29.1	CO5	Netra Swasthyahitakara Dinacharya.
29.2	CO5	Netra Swasthyahitakara Aahara Evam Vihara.
29.3	CO5	Jeevanasatwa-kshayajanya Netraroga (Vitamin deficiency disorders)(Malnutritional Eye disorders).
30.1	CO2,CO5	Poster presentation on ICHD-3 Classification. Compiled presentation on Common Yogas used in Shiroroga.
31.1	CO1	Discussion on Shiraso Uttamangatwam.
31.2	CO3,CO5	Etiology, Clinical Features,and Management of Ardhabhedaka, Anantavata and

		Suryavarta.
32.1	CO1	Presentation on Anatomy of Ear.
32.2	CO1,CO2,CO4,CO5	Samanya Nidana,Samanya Samprapti,Sadhya-asadhyata of Karna Rogas.
34.1	CO3,CO5	Discussion on Nasya. Current research studies on Nasya and Dhumapana in diseases in Shalakyatantra.
35.1	CO2,CO5	Discussion on Puyarakta, Nasapaka, Nasashopha.
36.1	CO1	Elaboration on Mukha- Shareera.
39.1	CO2,CO5	Brainstorming session on National Oral Health Programme and Dantarakshavidhi.
41.1	CO1	Discussion on Shareer Kriya of Karna and Shravanendriya, and Physiology of Equilibrium.
42.1	CO7	Group discussion on National Programme for Prevention and Control of Deafness and Noise Pollution.
43.1	CO2,CO3,CO5	Presentation on Putikarna.
43.2	CO1,CO2,CO3,CO4, CO5	Surgical steps in Tympanoplasty.
45.1	CO2,CO5	Diagnosis and Treatment of Rhinitis.
45.2	CO2,CO5	Diagnosis and treatment of Atrophic and Allergic Rhinitis; Summary of Research studies on Allergic Rhinitis.
46.1	CO2,CO5	Diagnosis and treatment of Deepta, Putaka, Nasaparishosha, Bhramshathu, Nasanaha, Kshavathu.
47.1	CO5,CO6	Surgical management of Nasavamsha-kutilatwa (Deviated Nasal Septum).
48.1	CO2,CO5	Laxanas and Chikitsa of Sheetada, Upakusha, Dantaveshtaka and Dantavidradhi.

49.1	CO2,CO5	Clinical features and management of ankyloglossia and glossitis (Hairy tongue, Geographic tongue, Migratory Glossitis).
50.1	CO2,CO5	Explanation of Root Canal Treatment.
53.1	CO3,CO4,CO5	Purva-Pradhana-Pashchat Karma for Karnasandhana (Auroplasty).
54.1	CO1,CO2,CO3,CO4, CO5,CO6	Etiology, Pathology, Clinical Features and Management of Benign Paroxysmal Positional Vertigo (BPPV)
55.1	CO2,CO5	Techniques for removal of Agantuja Shalya (Foreign Body) from Ear..
56.1	CO5	Surgical treatment of Nasarsha (Nasal Polyps).
57.1	CO5	Management of Nasagata Raktasrava (Epistaxis).
58.1	CO2,CO5	Nasarbuda- Tumors of nose and paranasal sinuses.
61.1	CO2,CO5	Discussion on Talu-Arbuda, Talushosha, Talupaka.
62.1	CO2,CO3,CO5	Etiology, clinical features and treatment of Parotitis.
62.2	CO2,CO5	Group Discussion on Galavidradhi.
63.1	CO5	Discussion on Samanya Yogas used in Shiro Karna Nasa Mukha Roga.

Table 5 : List of Practicals

(*Refer table 3 of similar activity number)

Practical No*	CO No	Practical Activity details
1.1	CO3,CO7	History taking in cases of Netraroga.
1.2	CO3,CO7	Structural Examination of Netra.
1.3	CO3,CO7	Functional examination of Netra.
2.1	CO6	A) Procedures of Seka and Pindi. B) Method of taking Informed consent from patients.
2.2	CO6,CO7	Demonstration on Vidalaka and Aschyotana.
2.3	CO5	Discussion on Tarpana and Putapaka.
2.4	CO5,CO6,CO7	Procedure of Anjana.
5.1	CO3	Evaluation of Netra-sandhi and Dacryocystitis.
8.1	CO3	Examination of Periocular Structures - Bhru (Eyebrow), Pakshma (Eyelash), Pakshmavartmasandhi (Lid Margin), and Vartma (Eyelid).
8.2	CO5	Incision and curettage (I&C) in Chalazion surgery.
8.3	CO3,CO4,CO7	Cases of Eyelid Malposition: Pakshmakopa (Trichiasis, Entropion)and Ectropion; Trichiatic cilia removal by Epilation.
10.1	CO3,CO4,CO6,CO7	History Taking and Case Presentation: Assessment of Patients with Abnormal Eyelid Mobility.
10.2	CO3,CO4,CO6,CO7	History Taking and Case Presentation: Assessment of Patients with Vartma-shopha(lid edema).
11.1	CO5,CO7	Collaborative Observation of Bhedana Karma in Netraroga (Incision and Drainage/ Curettage).
12.1	CO5,CO7	Collaborative Observation of Lekhana Karma in Netraroga.

13.1	CO3,CO4	Examination of the Shuklamandala (Conjunctiva and Sclera).
13.2	CO3,CO4,CO6,CO7	Cases of Arma, Pishtaka, and growths or discolourations on Shuklamandala.
13.3	CO3,CO4,CO6,CO7	Assessment of patients with Raktaakshi (Red Eye), focusing on Arjuna (Sub-Conjunctival Hemorrhage).
14.1	CO3,CO4,CO6,CO7	Assessment of Patients with Raktaakshi (Red Eye) - Episcleritis / Scleritis: Differentiating Diffuse / Nodular Forms.
15.1	CO5	Observation of Chhedana(Excision) in Netraroga.
17.1	CO3,CO4,CO7	Evaluation of Savrana Shukra (Corneal Ulcer).
17.2	CO3,CO7	Slit lamp examination.
18.1	CO2,CO3,CO4,CO7	Evaluation of Uveitis.
18.2	CO3,CO6,CO7	Assessment of Anterior chamber.
21.1	CO3,CO4,CO7,CO8	Evaluation of Raktaakshi (Red eye) with Srava (Discharge).
22.1	CO3,CO4,CO7,CO8	Evaluation of Shushkakshi (Dry eye evaluation).
23.1	CO3,CO7	Discussion on Tonometry and Perimetry.
24.1	CO3,CO7	Fundus evaluation (ophthalmoscopy).
24.2	CO3,CO4,CO6,CO7	History taking in a patient with Timira (Dimness of vision).
25.1	CO5,CO6,CO7,CO8	Evaluation of Agantuja Shalya (Foreign body in eyes).
26.1	CO3,CO7	Examination of Cataract.
27.1	CO2,CO5,CO7	Case discussion on Madhumehajanya Drishtiroga (Diabetic Retinopathy).
29.1	CO5,CO6	Use of Samanya Chakshushya Dravyas in Eye diseases..
29.2	CO5	Prescription of Samanya Chakshushya Yoga.

29.3	CO4,CO7	Evaluation of Naktandhya (night blindness).
30.1	CO2,CO5,CO7	Evaluation of Shirahshoola.
30.2	CO2,CO7	Introduction of case sheet for Shiro Karna Nasa Mukha roga.
31.1	CO5,CO6,CO7	Application of Shirolepa, Shiro-abhyanga, Shiroseka, and Shirobasti.
31.2	CO2,CO3,CO7	Evaluation of Ardhavabhedaka.
32.1	CO3,CO7	Identification and use of basic Ear OPD Instruments.
32.2	CO5,CO6,CO7	Case taking in Karnaroga.
33.1	CO2,CO3,CO4,CO5, CO7	Evaluation of Karnashoola (Otalgia).
34.1	CO2,CO5,CO7	General histroy taking, Specific history taking in the cases of Nasaroga.
36.1	CO3,CO7,CO8	Oro - Dental case taking and examination.
36.2	CO3,CO7,CO8	Poorva, Pradhana and Pashchat Karma of Kavala, Gandusha and Mukhapratisarana.
40.1	CO3,CO7	Purva- Pradhana and Pashchat Karma related to the procedures of Prachchhanna and Jalaukavacharana.
40.2	CO3,CO7	Discussion on Agnikarma in Shiroroga.
42.1	CO2,CO3,CO4	Case Taking and Differential Diagnosis of Badhirya.
42.2	CO3,CO4,CO5	Tuning Fork Test (Rinne's, Weber) and their interpretation.
42.3	CO3,CO5	Audiometry and its interpretation.
42.4	CO2,CO3,CO4	Assessment of Karna Kshweda-Naada (Tinnitus).

42.5	CO5,CO6,CO7	Procedure of Karnapoorana.
42.6	CO5,CO6	Procedures of Karna Pramarjana, Karna Prakshalana, and Karna Dhoopana.
43.1	CO2,CO3,CO4,CO5	Etiology, Clinical Features and Medical Management of Karna Srava (Otorrhea).
43.2	CO2,CO3,CO4,CO5	Surgical procedures of Mastoidectomy and Myringotomy.
44.1	CO2,CO3,CO4,CO5	Assessment of Karna Kandu.
44.2	CO1,CO3,CO5,CO6	Removal of Ear Wax.
46.1	CO3,CO4,CO7	Examination of Nasa and Nasagandakutalalatasthi-kuhara (Nose and Paranasal sinuses). Evaluation of Nasa srava (Rhinorrhoea). Evaluation of Sinusitis.
51.1	CO5,CO7	Contemporary Pharmaceutical Agents Used in Karna Nasa Mukha Roga.
54.1	CO2,CO3,CO4,CO5, CO7	Case discussion on Bhraamara (Vertigo).
55.1	CO5,CO7	Case discussion on Agantuja Shalya in Karna (Foreign Body in Ear).
56.1	CO3,CO4,CO7	Evaluation of Nasa-avarodha. Evaluation of Nasarsha (Nasal polyp).
57.1	CO3,CO5,CO6	Evaluation of Nasagata raktasrava (Anterior epistaxis).
58.1	CO3,CO4,CO7	Evaluation of Gandhajnana Vikruthi (Anosmia, Hyposmia, Parosmia).
59.1	CO3,CO5,CO7	Case discussion on Agantuja Shalya in Nasa(nose).
60.1	CO5,CO6	Details in Nasasandhana Vidhi.
62.1	CO2,CO3,CO5,CO7	Cases of Geelana-Shoola (Odynophagia), Geelana-Kashta (Dysphagia), and Mukha Dourgandhya (Hallitosis).
62.2	CO2,CO3,CO5,CO7	Case-based discussion on Kantharoga.
62.3	CO2,CO3,CO5,CO7	Case Discussion on Swarabheda and Kantha Koojana.

63.1	CO5,CO7	Common Yogas used in Shiro Karna Nasa Mukha Roga- their usage, indications, outcomes.

Table 6 : Assessment Summary: Assessment is subdivided in A to H points

6 A : Number of Papers and Marks Distribution

Subject Code	Papers	Theory	Practical/Clinical Assessment (200)					Grand Total
			Practical	Viva	Elective	IA	Sub Total	
AyUG-SL	2	200	100	70	-	30	200	400

6 B : Scheme of Assessment (Formative and Summative)

PROFESSIONAL COURSE	FORMATIVE ASSESSMENT			SUMMATIVE ASSESSMENT
	First Term (1-6 Months)	Second Term (7-12 Months)	Third Term (13-18 Months)	
Third	3 PA & First TT	3 PA & Second TT	3 PA	**UE****

PA: Periodical Assessment; **TT:** Term Test; **UE:** University Examinations; **NA:** Not Applicable.
******University Examination shall be on entire syllabus

6 C : Calculation Method for Internal assessment Marks

TERM	PERIODICAL ASSESSMENT*					TERM TEST**	TERM ASSESSMENT	
	A 4	B	C	D	E	F	G	H
	1 (15 Marks)	2 (15 Marks)	3 (15 Marks)	Average (A+B+C/3)	Converted to 30 Marks (D/15*30)	Term Test (Marks converted to 30)	Sub Total _/60 Marks	Term Assessment (…./30)
FIRST							E+F	(E+F)/2
SECOND							E+F	(E+F)/2
THIRD						NIL		E
Final IA	Average of Three Term Assessment Marks as Shown in 'H' Column.							
	Maximum Marks in Parentheses *Select an Evaluation Method which is appropriate for the objectives of Topics from the Table 6 D for Periodic assessment. Conduct 15 marks assessment and enter marks in A, B, and C. ** Conduct Theory (100 Marks)(MCQ(20*1 Marks), SAQ(8*5), LAQ(4*10)) and Practical (100 Marks) Then convert to 30 marks.							

6 D : Evaluation Methods for Periodical Assessment

S. No.	Evaluation Methods
1.	Practical / Clinical Performance
2.	Viva Voce, MCQs, MEQ (Modified Essay Questions/Structured Questions)
3.	Open Book Test (Problem Based)
4.	Summary Writing (Research Papers/ Samhitas)
5.	Class Presentations; Work Book Maintenance
6.	Problem Based Assignment
7.	Objective Structured Clinical Examination (OSCE), Objective Structured Practical Examination (OPSE), Mini Clinical Evaluation Exercise (Mini-CEX), Direct Observation of Procedures (DOP), Case Based Discussion (CBD)
8.	Extra-curricular Activities, (Social Work, Public Awareness, Surveillance Activities, Sports or Other Activities which may be decided by the department).
9.	Small Project
10.	Activities Indicated in Table 3 - Column G3 as per Indicated I, II or III term in column I3.

Topics for Periodic Assessments

PA	PAPER ONE(topic no.)	PAPER TWO (topic no.)
PA-1	Topic 01	Topic 30,31.
PA-2	Topic 02,03,04,05.	Topic 32,33,34,35.
PA-3	Topic 06,07	Topic 36,37,38.
Term Test – 1	Entire Syllabus of Term 1 of 2 papers	
PA-4	Topic 09,10,11,12.	Topic 40,41,42.
PA-5	Topic 13,14,15,16.	Topic 43,44,45.
PA-6	Topic 17,18,19,20.	Topic 46,47,48,49,50.
Term Test 2	Entire Syllabus of Term 2 of 2 papers	
PA-7	Topic 22,23.	Topic 52,53,54,55.
PA-8	Topic 24,25,26.	Topic 56,57,58,59.
PA-9	Topic 27,28,29.	Topic 60,61,62,63.

6 E : Question Paper Pattern

III PROFESSIONAL BAMS EXAMINATIONS
AyUG-SL
PAPER-I
Time: 3 Hours Maximum Marks: 100
INSTRUCTIONS: All questions compulsory

		Number of Questions	**Marks per question**	**Total Marks**
Q 1	MULTIPLE CHOICE QUESTIONS (MCQ)	20	1	20
Q 2	SHORT ANSWER QUESTIONS (SAQ)	8	5	40
Q 3	LONG ANSWER QUESTIONS (LAQ)	4	10	40
				100

Similar for Paper II.

6 F : Distribution of theory examination

Paper 1 (Netraroga (Ophthalmology))					
Sr. No	**A List of Topics**	**B Marks**	**MCQ**	**SAQ**	**LAQ**
1	**Shareera, Nidaana Panchaka of Netraroga.**	30	Yes	Yes	No
2	**Samanya Chikitsa and Kriyakalpa.**		Yes	Yes	Yes
3	**Panchakarma and Netraroga.**		No	Yes	No
4	**Sanjnaharana in Netraroga.**		Yes	No	No
5	**Sandhigata Roga -1**		Yes	Yes	Yes
6	**Sandhigata Roga -2**		Yes	Yes	No
7	**Sandhigata Roga -3**		Yes	Yes	No
8	**Vartmagata Roga-1**	34	Yes	Yes	No
9	**Vartmagata Roga-2**		Yes	No	No
10	**Vartmagata Roga -3**		Yes	Yes	No
11	**Bhedana Karma**		Yes	Yes	No
12	**Lekhana Karma.**		Yes	Yes	No
13	**Shuklagata Roga -1**		Yes	Yes	Yes
14	**Shuklagata Roga -2**		Yes	Yes	No
15	**Chhedana Karma.**		Yes	Yes	No
16	**Agnikarma and Ksharakarma.**		Yes	Yes	No
17	**Krishnagata Roga -1**		Yes	Yes	Yes
18	**Krishnagata Roga -2**		Yes	Yes	Yes
19	**Dravyas Used In Netrachikitsa-1**		Yes	Yes	No
20	**Eye Donation**		No	Yes	No
21	**Sarvagata Roga -1**	18	Yes	Yes	Yes
22	**Sarvagata Roga -2**		Yes	Yes	No
23	**Glaucoma**		Yes	Yes	Yes
24	**Drishtigata Roga-1**	18	Yes	Yes	Yes
25	**Nayanabhighata**		Yes	Yes	No
26	**Drishtigata Roga-2**		Yes	Yes	Yes
27	**Drishtigata Roga- 3**		Yes	Yes	No

28	**Dravyas used in Netra Chikitsa-2**		Yes	No	No
29	**Dravyas used in Netra Chikitsa-3, Swasthavritta, Kuposhanajanya Netravikara (Malnutritional Eye Disorders), Community Ophthalmology.**		Yes	Yes	No
Total Marks		**100**			

Paper 2 (Shiro-Karna-Nasa-Mukharoga (Oto-rhino-laryngology and Oro-dentistry))					
Sr. No	**A List of Topics**	**B Marks**	**MCQ**	**SAQ**	**LAQ**
30	**Enumeration, Nidana Panchaka and Sadhya-asadhyata of Shiroroga**	10	Yes	Yes	No
31	**Samanya Chikitsa of Shiroroga**		Yes	Yes	Yes
32	**Karna Rachana Shareera, Nidana Panchaka and Samanya Chikitsa of Karnaroga**	25	Yes	Yes	No
33	**Karnaroga 1**		Yes	Yes	Yes
34	**Nasa Shareera, Ghranendriya and Nidana Panchaka of Nasaroga**		Yes	Yes	No
35	**Pratishyaya**		Yes	Yes	Yes
36	**Mukha Shareera and Nidana Panchaka of Mukharoga**		Yes	Yes	No
37	**Oshtharoga**	10	Yes	Yes	No
38	**Sarvasara Mukharoga**		Yes	Yes	No
39	**National Oral Health Programme**		Yes	Yes	No
40	**Kapalagata Roga**	10	Yes	Yes	No
41	**Karna Kriya Shareera and Shravanendriya**		Yes	Yes	No
42	**Karna Badhirya, Karna Naada and Kshweda**		Yes	Yes	Yes
43	**Karna Srava and Putikarna**	05	Yes	Yes	No
44	**Karnakandu, Karnaguthaka, Karnapratinaha, Krumikarna, Karnavidradhi, Karnapaka.**		Yes	Yes	No
45	**Rhinitis**		Yes	Yes	No
46	**Deeptadi Nasaroga.**		Yes	Yes	No
47	**Nasavamsha-kutilatwa (Deviated Nasal Septum).**	10	Yes	Yes	Yes
48	**Dantamulagata roga**		Yes	Yes	No
49	**Jihvagata Roga**		Yes	Yes	No

50	**Krimidantaka and Dantaharsha**		Yes	Yes	Yes
51	**Dravyas used in Karna Nasa Mukha Roga Chikitsa-1**		Yes	No	No
52	**Karnarsha and Karnarbuda**	10	Yes	Yes	No
53	**Karnasandhana**		Yes	Yes	No
54	**Bhraamara (Vertigo)**		Yes	Yes	No
55	**Agantuja Shalya in Karna**	10	Yes	Yes	No
56	**Nasarsha**		Yes	Yes	Yes
57	**Nasagata Raktasrava**		Yes	Yes	Yes
58	**Nasarbuda**		Yes	Yes	No
59	**Agantuja Shalya in Nasa**	10	Yes	Yes	No
60	**Nasa-abhighata, Nasasandhana**		Yes	Yes	No
61	**Talugata Roga**		Yes	Yes	Yes
62	**Kantharoga**		Yes	Yes	Yes
63	**Dravyas used in Karna Nasa Mukha Roga Chikitsa-2**		Yes	Yes	No
Total Marks		**100**			

6 G : Instructions for UG Paper Setting & Blue print

1. All questions shall be compulsory.
2. Questions shall be drawn based on Table 6F, which provides the topic name, types of questions (MCQ(Multiple Choice Question), SAQ(Short Answer Question), LAQ(Long Answer Question)).
3. The marks assigned in Table 6F for each topic/group of topics shall be considered as the maximum allowable marks for that topic/group of topics.
4. Ensure that the total marks allocated per topic/group of topics do not exceed the limits specified in Table 6F.
5. Refer to Table 6F before setting the questions. Questions shall be framed only from topics where the type is marked as “YES”, and avoided if marked as “NO”.
6. Each 100-mark question paper shall contain:
   - 20 MCQs
   - 8 SAQs
   - 4 LAQs

7. MCQs:
   - Majority shall be drawn from the Must to Know part of the syllabus.
   - Questions from the Desirable to Know part of syllabus shall not exceed 3.
   - Questions from the Nice to Know part of syllabus shall not exceed 2.

8. SAQs:
   - Majority shall be drawn from the Must to Know part of the syllabus.
   - Questions from the Desirable to Know part of syllabus shall not exceed 1.
   - No questions shall be drawn from the Nice to Know part of syllabus.
   - SAQs shall assess understanding, application, and analysis, rather than simple recall.

9. LAQs:
   - All LAQs shall be drawn exclusively from the Must to Know part of the syllabus.
   - No questions shall be taken from the Desirable to Know or Nice to Know part of the syllabus.
   - Number of LAQs should not exceed one per topic unless maximum marks exceed 20 for the topic.

10. Long Answer Questions shall be structured to assess higher cognitive abilities, such as application, analysis, and synthesis.
11. Follow the guidelines in User Manual III for framing MCQs, SAQs, and LAQs.

6 H : Distribution of Practical Exam

S.No	Heads	Marks
1	Long case assessment • Assess ability to gather and interpret patient information accurately. • Gauge the ability to organise the data into a coherent case presentation. • Appraise the clarity of thought process showing how student narrowed down the possibilities to formulate a differential diagnosis. • Examine the ability to develop a comprehensive management plan, including immediate treatment for acute issues and ongoing management for chronic conditions. This should cover investigations, treatment options, and any necessary referrals. • Judge communication skills and preparation to answer questions and discuss rationale for the decisions student has made.	30
2	Short case assessment (One case) A Short Case,featuring either a simulated or a real patient is used to assess a student’s ability to quickly approach a case and highlight and interpret different key clinical signs before offering a differential diagnosis. * The candidate is given approximately 8-12 mins to examine a part or anatomical area. * No history is taken. * Verbal communication is only allowed to get the patient to follow a set of instructions or if the patient's speech is being formally tested. * Following the examination the candidate must give a 3-5 minute **summary** of 1. The examination findings 2. The likely differential diagnosis based on the finding 3. The probable causes and severity of the condition 4. General discussion related to the above * A smooth and confident technique and a gentle, kind and friendly manner indicate professionalism.	10

3	**Spotters** 5 spotters of 2 marks each . Spotter 1) Any Ayurvedic drug described in Paper one. Spotter 2) Any Ayurvedic drug described in Pape two. Spotter 3) Any drug from contemporary medical science described in Papers one and two. Spotter 4) Clear picture of any of Anatomical part, pathological condition,and investigations described in paper one. Spotter 5) Clear picture of any of Anatomical part, pathological condition,and investigations described in paper two.	10
4	Skill Based Clinical Assessment	40
5	Journal or Case Record Viva Ask students to provide a concise summary of the case, including chief complaints, diagnosis, and treatment plan. Question the relevance of history, investigation findings, and clinical examination to the diagnosis. Probe the reasoning behind the chosen treatment and its expected outcomes. Present alternative scenarios and ask students how they would adapt their diagnosis or management plan. Assess the accuracy, clarity, and completeness of the journal or case record. Ask students how they would approach a similar case in a practical setting. Inquire about adherence to guidelines or protocols relevant to the case. Marks Distribution- 1. Accuracy, Neatness and completeness of Journal- 03 marks. 2. Adaptation to alternative scenarios and differential diagnosis- 02 marks. 3. Clarity about the investigations,treatment plan, follow ups and outcomes- 05 marks.	10

6	Viva- Instruments in an oral examination: (20 marks) 1.Pose direct questions about different instruments, their uses, and maintenance. 2. Ask students to identify instruments from a set. This can be done visually or through touch if the exam format allows. 3. Have students explain or demonstrate the function of each instrument, detailing their specific uses during procedures. 4.Inquire about the proper sterilization, maintenance, and storage of instruments to ensure they understand these crucial aspects. 5. Present clinical scenarios where students must select the appropriate instruments and explain their choice based on the scenario. 6. Select minimum two instruments each from Ear examination and surgery , Nose Examination and surgery, Throat(pharynx and larynx) examination and surgery. 7. Select minimum four instruments from Eye examination and surgery. Xray examination (10 marks) 1. Test their ability to identify anatomical structures on X-rays relevant to ENT. For example, they should be able to distinguish between different sinuses, the structures of the ear, and the anatomy of the throat and neck. 2. Present clinical scenarios relevant to ENT and ask the student which X-ray views or types would be most appropriate for diagnosis. Assess their ability to justify their choices based on the clinical context. 3. Provide students with sample X-rays to interpret. Evaluate their ability to detect common ENT conditions such as sinusitis, laryngeal masses, mastoiditis, foreign bodies, and fractures of the nasal bones. 4. Provide minimum one Xray each for Ear and Mastoid; Nose; Paranasal Sinuses; Pharynx and Larynx. Oral Examination -(30 marks.) Ask core questions on the anatomy and physiology of Netra, Karna, Nasa,Mukha	70

	and Shiras. Discuss Nidana, Samprapti, and Lakshana of common Shalakya disorders. Inquire about treatment protocols such as Panchakarma and Kriyakalpa Question the use and maintenance of Shalakya instruments. Present clinical scenarios to assess diagnostic and treatment planning skills. Include questions on advancements such as OCT or endoscopic techniques in Shalakyatanthra. Mark Distribution- A) Netraroga- 10 marks. B) Karnaroga- 05 marks. C) Nasaroga- 05 marks. D) Mukharoga- 05 marks. E) Shiroroga- 05 marks. Communication Skill (10 Marks)	
7	Internal assessment.	30
Total Marks		**200**

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13.	Dr. Nilakshi Shekhar Pradhan, Professor & HOD Shalakya, SSAM, Hadapsar Pune, Maharashtra
14.	Dr. Vaishali Pavan Mali, Assistant Professor, Department of Samhita –Siddhant, Ch. Brahm Prakash Ayurved Charak Sansthan, New Delhi
15.	Dr Maya V. Gokhale, HOD, Professor Department of Panchakarma, SSAM, Hadapsar, Pune Maharashtra

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3.	Member: Dr. Shivanand Patil, Assistant Professor, Department of Agada Tantra, All India Institute of Ayurveda, Goa,

Abbreviations

Domain		T L Method		Level		Assessment		Integration	
CK	Cognitive/Knowledge	L	Lecture	K	Know	T-CS	Theory case study	V-RS	V RS
CC	Cognitive/Comprehension	L&PPT	Lecture with PowerPoint presentation	KH	Knows how	T-OBT	Theory open book test	V-KS	V KS
CAP	Cognitive/Application	L&GD	Lecture & Group Discussion	SH	Shows how	P-VIVA	Practical Viva	H-KC	H KC
CAN	Cognitive/Analysis	L_VC	Lecture with Video clips	D	Does	P-REC	Practical Recitation	H-SH	H SH
CS	Cognitive/Synthesis	REC	Recitation			P-EXAM	Practical exam	H-PK	H PK
CE	Cognitive/Evaluation	SY	Symposium			PRN	Presentation	H-SHL	H SHL
PSY-SET	Psychomotor/Set	TUT	Tutorial			P-PRF	Practical Performance	H-SP	H SP
PSY-GUD	Psychomotor/Guided response	DIS	Discussions			P-SUR	Practical Survey	H-KB	H-KB
PSY-MEC	Psychomotor/Mechanism	BS	Brainstorming			P-EN	Practical enact	H-Samhita	H-Samhita
PSY-ADT	Psychomotor Adaptation	IBL	Inquiry-Based Learning			P-RP	Practical Role play	V-DG	V DG
PSY-ORG	Psychomotor/Origination	PBL	Problem-Based Learning			P-MOD	Practical Model	V-RN	V RN
AFT-REC	Affective/ Receiving	CBL	Case-Based Learning			P-POS	Practical Poster	V-RS	V RS
AFT-RES	Affective/Responding	PrBL	Project-Based Learning			P-CASE	Practical Case taking	V-AT	V AT
AFT-VAL	Affective/Valuing	TBL	Team-Based Learning			P-ID	Practical identification	V-SW	V SW
AFT-SET	Affective/Organization	TPW	Team Project Work			P-PS	Practical Problem solving		
AFT-CHR	Affective/ characterization	FC	Flipped Classroom			QZ	Quiz		
PSY-PER	Psychomotor/perception	BL	Blended Learning			PUZ	Puzzles		
PSY-COR	Psychomotor/ Complex Overt Response	EDU	Edutainment			CL-PR	Class Presentation		
		ML	Mobile Learning			DEB	Debate		
		ECE	Early Clinical Exposure			WP	Word puzzle		
		SIM	Simulation			O-QZ	Online quiz		
		RP	Role Plays			O-GAME	Online game-based assessment		
		SDL	Self-directed learning			M-MOD	Making of Model		
		PSM	Problem-Solving Method			M-CHT	Making of Charts		
		KL	Kinaesthetic Learning			M-POS	Making of Posters		

		W	Workshops			C-INT	Conducting interview		
		GBL	Game-Based Learning			INT	Interactions		
		LS	Library Session			CR-RED	Critical reading papers		
		PL	Peer Learning			CR-W	Creativity Writing		
		RLE	Real-Life Experience			C-VC	Clinical video cases		
		PER	Presentations			SP	Simulated patients		
		D-M	Demonstration on Model			PM	Patient management problems		
		PT	Practical			CHK	Checklists		
		X-Ray	X-ray Identification			Mini-CEX	Mini-CEX		
		CD	Case Diagnosis			DOPS	DOPS		
		LRI	Lab Report Interpretation			CWS	CWS		
		DA	Drug Analysis			RS	Rating scales		
		D	Demonstration			RK	Record keeping		
		D-BED	Demonstration Bedside			COM	Compilations		
		DL	Demonstration Lab			Portfolios	Portfolios		
		DG	Demonstration Garden			Log book	Log book		
		FV	Field Visit			TR	Trainers report		
						SA	Self-assessment		
						PA	Peer assessment		
						360D	360-degree evaluation		
						PP-Practical	Practical		
						VV-Viva	Viva		
						DOAP	Demonstration Observation Assistance Performance		
						SBA	Scenario Based Assessment		
						CBA	Case based Assessment		
						S-LAQ	Structured LAQ		
						OSCE	Observed Structured Clinical Examination		
						OSPE	Observed Structured Practical Examination		
						DOPS	Direct observation of procedural skills		

Name of College with LOGO

AYURVEDACHARYA (B.A.M.S.)

THIRD PROFESSIONAL B.A.M.S.

<< Subject Name >>

(SUBJECT CODE : AyUG-)

JOURNAL /ACTIVITY BOOK

Name of the student :

Institutional Roll No. :

Examination Reg. No. :

Academic Year :

(Name of the College)

(Affiliated to –National Commission for Indian System of Medicines, New Delhi &

Name of the University)

Name of the department

Batch- _____

Certificate

This is to certify that, Mr. / Ms. _____, Enrolment Number-_____ has satisfactorily completed the Practicals in (Subject Name) prescribed by the (Name of University) as a part of the Third Professional B.A.M.S. Course.

Examination Seat No.: _____

Sign. of Teacher Sign. of H.O.D.

Date of Examination- _____

Sign. Of Internal Examiner-_____

Sign. Of External Examiner-_____

JOURNAL /ACTIVITY BOOK

<< Subject name >>

(SUBJECT CODE : AyUG -)

Journal Cum Activity Book

DEPARTMENT OF

<< Name of Department >>

Name of the College

INDEX

Sr no	Topic	Date	Page no
1			
2			
3			
4			

Sl.No	Minimum No of cases to be included as per the following guidelines
1.	**Netraroga Chikitsa Patrika- 15 Cases**
2.	**Karnaroga Chikitsa Patrika- 05 Cases**
3.	**Nasaroga Chikitsa Patrika- 05 cases**
4.	**Mukharoga Chikitsa Patrika- 03 cases**
5.	**Shiroroga Chikitsa Patrika- 02 cases**

NETRA-ROGA CHIKITSA PATRIKA

Patient's Name :……Age/ ……. Date/ ……..

Sex/ ……OPD No. /IPD No. ……

Religion/ ……Occupation: ……..

D.O.A/……..D.O.D/……D.O.E/……

Education/ ……..

Marital Status ……. Socio-economic Status-

Address/……

Provisional Diagnosis/ तात्कालिक निदान:.....

CHIEF COMPLAINTS WITH DURATION/ प्रमुख वेदना -

ASSOCIATED COMPLAINTS/ अनुबंध वेदना -

HISTORY OF PRESENT ILLNESS/वर्तमान व्याधि वृत्तान्त -

PAST HISTORY/ पूर्व व्याधि वृत्तान्त -

FAMILY HISTORY/ कुल वृत्तान्त -

PAST TREATMENT HISTORY/ पूर्व चिकित्सा इतिहास -

PERSONAL HISTORY/ -

Frequent dietary items-/ आहार :

Addictions/ व्यसन :

Sleep/ निद्रा :

Bowel Movement/ मल प्रवृत्ति:

Urinary Habits/ मूत्र प्रवृत्ति

EXAMINATION- 1. GENERAL EXAMINATION/ सामान्य परीक्षण -

नाड़ी – Pulse- B.P.

मल Temp.

मूत्र R.R.

जिह्वा Agni.

शब्द Koshtha

क्षुधा :

स्पर्श Prakriti

आकृति Sara

2. SYSTEMIC EXAMINATION/सर्वांग परीक्षण -

3. OCULAR EXAMINATION/नेत्र परीक्षण –

Head Posture/शिर: स्थिती

Facial Symmetry/ मुख द्विपार्श्व-सम्मिति

OD **OS**

Eye Brows/ भ्रू मंडल

Eye Lashes/ पक्ष्म मंडल

Eye Lids/ वर्त्म मंडल

Orbit/ अक्षिकूट

Conjunctiva/ नेत्र श्लेष्मावरण कला

Sclera/ शुक्ल मण्डल

कृष्णमंडल

Cornea/ कर्णिका

Size

Shape

Curvature

Transparency

Vascularization

Sensation

Iris/ तारका

Color

Pattern

Synechiae

Pupil/ दृष्टिमंडल

Shape

Reflex

Size

Position

Margin

Lens/ दृष्टिमणि

Color

Transparency

Displacement

Anterior Chamber/ पूर्व वेश्म

Depth

Content

Lacrimal apparatus/ अश्रुमार्ग

Lacrimal Puncta/ अश्रुवाहिनी मुख

Lacrimal Sac/ अश्रुकोष

Examination of Junctional Area/ संधिपरीक्षण

Outer canthus/ अपांगगत संधि

Inner canthus/ कनीनिकागत संधि

Eye–lid margin/ पक्ष्मवर्त्मगत संधि

Fornix/ वर्त्मशुक्लगत संधि

Limbus/ शुक्लकृष्णगतसंधि

VISUAL ACUITY TEST/ दर्शन शक्ति परीक्षण

Vision	Right	Left	Both
Without Glasses- Distance			
Pin Hole			
Near			
Pin Hole			
With Glasses- Distance			
Near			

VISUAL FIELD/ दृष्टिक्षेत्र

COLOR VISION/ वर्ण ज्ञान–व्यवच्छेद

RETINA/ दृष्टिपटल परीक्षण

Direct Ophthalmoscopy **right** **left**

Media/ माध्यम

Optic Disc/ दृष्टनाडी शीर्ष

CD Ratio

Macula Lutea/ पीत बिंदु

Blood Vessels/ रक्त वाहिन्या

General Fundus/ दृष्टिपटल

TONOMETRY/ नेत्र दाव परीक्षण

OTHER SPECIFIC EXAMINATIONS/ अन्यविशेष परीक्षण (OCT/FFA/ERG/EOG/SCAN etc.)

LAB INVESTIGATIONS/ प्रयोगशाला जांच

NIDANA/ निदान

POORVA ROOPA/ पूर्वरूप

ROOPA/रूप

SAMPRAPTI/ सम्प्राप्ति

SAMPRAPTI GHATAKA/ सम्प्राप्ति घटक

DIFFERENTIAL DIAGNOSIS

COMPLICATIONS/ उपद्रव

DIAGNOSIS/ व्याधि निर्धारण

PROGNOSIS/ साध्य-असाध्यता

TREATMENT/चिकित्सा

- **Treatment Principle/चिकित्सा सूत्र**

Oral Medications/ अभ्यन्तरयोग

SHAMANAUSHADIS	PRAMANA	ANUPANA	DURATION

- **Name of Kriya Kalpa/Anushastra Karma/Shastra Karma**

पूर्व कर्म

प्रधानकर्म

पश्चात् कर्म

SUITABLE-UNSUITABLE DIET-LIFESTYLE/ पथ्य-अपथ्य आहार- विहार

FOLLOW UPS-

Date	Clinical features	Treatment

Sign of Teacher **Name of Student.**

---------- X0X ----------

KARNAROGA CHIKITSA PATRIKA

Patient's Name :……Age/ ……. Date/ ……..

Sex/ ……OPD No. /IPD No. ……

Religion/ ……Occupation: ……..

D.O.A/……..D.O.D/……D.O.E/……

Education/ ……..Habitat …….

Marital Status ……. Socio-economic Status-

Address/……

PROVISIONAL DIAGNOSIS/ तात्कालिक निदान:.....

CHIEF COMPLAINTS WITH DURATION/ प्रमुख वेदना -

ASSOCIATED COMPLAINTS/ अनुबंध वेदना -

HISTORY OF PRESENT ILLNESS/वर्तमान व्याधि वृत्तान्त -

PAST HISTORY/ पूर्व व्याधि वृत्तान्त -

FAMILY HISTORY/ कुल वृत्तान्त -

PAST TREATMENT HISTORY/ पूर्व चिकित्सा इतिहास -

PERSONAL HISTORY/ -

Frequent dietary items-/ आहार :

Addictions/ व्यसन :

Sleep/ निद्रा :

Bowel Movement/ मल प्रवृत्ति:

Urinary Habits/ मूत्र प्रवृत्ति

EXAMINATION- 1. GENERAL EXAMINATION/ सामान्य परीक्षण -

नाड़ी – Pulse-	B.P.
मल	temp.
मूत्र	R.R.
जिह्वा	Agni.
शब्द	koshtha
क्षुधा	
स्पर्श	Prakriti
आकृति	Sara

EXAMINATION OF EAR **RIGHT** **LEFT**

1. PINNA

Microtia

Macrotia

Colour and Texture

Auricle

Tragus

Lobule

Posterior surface

Tenderness

Movement

2. EXTERNAL AUDITORY MEATUS

Content

Ulcer

Srava

Furunculosis

Otomycosis

Growth

Any other-

3. TYMPANIC MEMBRANE

Colour

Shape (convex/concave)

Perforation

Anatomical Landmarks

4. MIDDLE EAR

Facial nerve

Eustachian Tube

Mastoid

5. INNER EAR

4. TUNING FORK EXAMINATION

Rinnes Test

Webbers Test

ABC Test

Any other

5. OTHER EXAMINATION

Voice Test

Whisper Test

LAB INVESTIGATIONS/ प्रयोगशाला जांच

AUDIOMETRY

NASA PAREEKSHANA

MUKHA PAREEKSHANA

X-RAY

NIDANA/ निदान

POORVA ROOPA/ पूर्वरूप

ROOPA/रूप

SAMPRAPTI/ सम्प्राप्ति

SAMPRAPTI GHATAKA/ सम्प्राप्ति घटक

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- **Treatment Principle/चिकित्सा सूत्र**

Oral Medications/ अभ्यन्तरयोग

SHAMANAUSHADIS	PRAMANA	ANUPANA	DURATION

- **Name of Kriya Kalpa/Anushastra Karma/Shastra Karma**

पूर्व कर्म

प्रधानकर्म

पश्चात् कर्म

SUITABLE-UNSUITABLE DIET-LIFESTYLE/ पथ्य-अपथ्य आहार- विहार

FOLLOW UPS-

Date	Clinical features	Treatment

Sign of Teacher **Name of Student.**

----------XOX----------

NASAROGA CHIKITSA PATRIKA

Patient's Name :……Age/ ……. Date/ ……..

Sex/ ……OPD No. /IPD No. ……

Religion/ ……Occupation: ……..

D.O.A/……..D.O.D/……D.O.E/……

Education/ ……..Habitat …….

Marital Status ……. Socio-economic Status-

Address/……

PROVISIONAL DIAGNOSIS/ तात्कालिक निदान:.....

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FAMILY HISTORY/ कुल वृत्तान्त -

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Sleep/ निद्रा :

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नाड़ी – Pulse- B.P.

मल temp.

मूत्र R.R.

जिह्वा Agni.

शब्द koshtha

क्षुधा

स्पर्श Prakriti

आकृति Sara

EXAMINATION OF NOSE AND PARANASAL SINUSES

- **EXAMINATION OF EXTERNAL NOSE**

Shape and size –

Growths-

- **ANTERIOR RHINOSCOPY**

  Nasavamsha (Septum)–

  Right left

  Space in Nasal cavities-

  Turbinates –

  Meatus-

  Nasal mucosa –

- **NASAGANDAKUTALALATASTHI (PARANASAL SINUSES)-**

- **SRAAVA– (quantity, colour, smell, consistency)**

- **POSTERIOR RHINOSCOPY**

LAB INVESTIGATIONS/ प्रयोगशाला जांच

KARNA PAREEKSHANA

MUKHA PAREEKSHANA

X-RAY

NIDANA/ निदान

POORVA ROOPA/ पूर्वरूप

ROOPA/रूप

SAMPRAPTI/ सम्प्राप्ति

SAMPRAPTI GHATAKA/ सम्प्राप्ति घटक

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TREATMENT/चिकित्सा

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पूर्व कर्म

प्रधानकर्म

पश्चात् कर्म

SUITABLE-UNSUITABLE DIET-LIFESTYLE/ पथ्य-अपथ्य आहार- विहार

FOLLOW UPS-

Date	Clinical features	Treatment

Sign of Teacher **Name of Student.**

---------- XOX ----------

MUKHAROGA CHIKITSA PATRIKA

Patient's Name :……Age/ ……. Date/ ……..

Sex/ ……OPD No. /IPD No. ……

Religion/ ……Occupation: ……..

D.O.A/……..D.O.D/……D.O.E/……

Education/ ……..Habitat …….

Marital Status ……. Socio-economic Status-

Address/……

PROVISIONAL DIAGNOSIS/ तात्कालिक निदान:……

CHIEF COMPLAINTS WITH DURATION/ प्रमुख वेदना -

ASSOCIATED COMPLAINTS/ अनुबंध वेदना -

HISTORY OF PRESENT ILLNESS/वर्तमान व्याधि वृत्तान्त -

PAST HISTORY/ पूर्व व्याधि वृत्तान्त -

FAMILY HISTORY/ कुल वृत्तान्त -

PAST TREATMENT HISTORY/ पूर्व चिकित्सा इतिहास -

PERSONAL HISTORY/ -

Frequent dietary items-/ आहार :

Addictions/ व्यसन :

Sleep/ निद्रा :

Bowel Movement/ मल प्रवृत्ति:

Urinary Habits/ मूत्र प्रवृत्ति

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मल	temp.
मूत्र	R.R.
Agni.	koshtha
शब्द	स्पर्श
क्षुधा	Prakriti
आकृति	Sara

EXAMINATION OF ORAL CAVITY

- **Examination of Oashtha.**

UPPER LIP

Shape **Site** **Colour**

Cracks

LOWER LIP

Shape **Site** **Colour**

Cracks

- **Examination of Buccal Mucosa**

- **Examination of Talu (Soft/Hard Palate and Uvula)**

- **Examination of Dantamula**
  Varna

  Srava

  Sparsha

  Shotha
- **Examination of Danta**
  Arrangement **DentalFormula**

  Asahatwa-Sensitivity **RightLeft**

  1 2 3 4 5 6 7 8 1 2 3 4 5 6 7 8

  Tenderness **1 2 3 4 5 6 7 8 1 2 3 4 5 6 78**

  Varna

Caries

Sharkara (tartar)

- **Examination of Jivha** **Paediatric Formula**

  Dorsal surface **Right Left**

  1 2 3 4 5 | **1 2 3 4 5**

  Lateral surface **1 2 3 4 5** | **1 2 3 4 5**

  Posterior surface

- **Other Examination- Nasophrynx, Laryngopharynx**

- **Examination of Tonsils, Palatopharyngeal fold, Palatoglossal fold**

- **Examination of Larynx-**

- **Examination of Neck- (Glands, swellings, cricoid, thyroid cartilage, vessels)**

LAB INVESTIGATIONS/ प्रयोगशाला जांच

X-RAY

NIDANA/ निदान

POORVA ROOPA/ पूर्वरूप

ROOPA/रूप

SAMPRAPTI/ सम्प्राप्ति

SAMPRAPTI GHATAKA/ सम्प्राप्ति घटक

DIFFERENTIAL DIAGNOSIS

COMPLICATIONS/ उपद्रव

DIAGNOSIS/ व्याधि निर्धारण

PROGNOSIS/ साध्य-असाध्यता

TREATMENT/चिकित्सा

- **Treatment Principle/चिकित्सा सूत्र**

Oral Medications/ अभ्यन्तरयोग

SHAMANAUSHADIS	PRAMANA	ANUPANA	DURATION

- **Name of Kriya Kalpa/Anushastra Karma/Shastra Karma**

पूर्व कर्म

प्रधानकर्म

पश्चात् कर्म

SUITABLE-UNSUITABLE DIET-LIFESTYLE/ पथ्य-अपथ्य आहार- विहार

FOLLOW UPS-

Date	Clinical features	Treatment

Sign of Teacher **Name of Student.**

----------XOX----------

SHIROROGA CHIKITSA PATRIKA

Patient's Name :……Age/ ……. Date/ ……..

Sex/ ……OPD No. /IPD No. ……

Religion/ ……Occupation: ……..

D.O.A/……..D.O.D/……D.O.E/……

Education/ ……..Habitat …….

Marital Status ……. Socio-economic Status-

Address/……

PROVISIONAL DIAGNOSIS/ तात्कालिक निदान:.....

CHIEF COMPLAINTS WITH DURATION/ प्रमुख वेदना -

ASSOCIATED COMPLAINTS/ अनुबंध वेदना -

HISTORY OF PRESENT ILLNESS/वर्तमान व्याधि वृत्तान्त -

PAST HISTORY/ पूर्व व्याधि वृत्तान्त -

FAMILY HISTORY/ कुल वृत्तान्त -

PAST TREATMENT HISTORY/ पूर्व चिकित्सा इतिहास -

PERSONAL HISTORY/ -

Frequent dietary items-/ आहार :

Addictions/ व्यसन :

Sleep/ निद्रा :

Bowel Movement/ मल प्रवृत्ति:

Urinary Habits/ मूत्र प्रवृत्ति

EXAMINATION- 1. GENERAL EXAMINATION/ सामान्य परीक्षण -

नाड़ी – Pulse-	B.P.
मल	temp.
मूत्र	R.R.
जिह्वा	Agni.
शब्द	koshtha
क्षुधा	
स्पर्श	Prakriti
आकृति	Sara

Examination Of Head

- **Head Posture –**
- **Facial Asymmetry –**
- **Examination Of Scalp –**
- **Any other- (redness/throbbing/venous dilatation/ etc.)**

LAB INVESTIGATIONS/ प्रयोगशाला जांच

KARNA PAREEKSHANA

NASA PAREEKSHANA

MUKHA PAREEKSHANA

X-RAY

NIDANA/ निदान

POORVA ROOPA/ पूर्वरूप

ROOPA/रूप

SAMPRAPTI/ सम्प्राप्ति

SAMPRAPTI GHATAKA/ सम्प्राप्ति घटक

DIFFERENTIAL DIAGNOSIS

COMPLICATIONS/ उपद्रव

DIAGNOSIS/ व्याधि निर्धारण

PROGNOSIS/ साध्य-असाध्यता

TREATMENT/चिकित्सा

- **Treatment Principle/चिकित्सा सूत्र**

Oral Medications/ अभ्यन्तरयोग

SHAMANAUSHADIS	PRAMANA	ANUPANA	DURATION

- **Name of Kriya Kalpa/Anushastra Karma/Shastra Karma**

पूर्व कर्म

प्रधानकर्म

पश्चात् कर्म

SUITABLE-UNSUITABLE DIET-LIFESTYLE/ पथ्य-अपथ्य आहार- विहार

FOLLOW UPS-

Date	Clinical features	Treatment

Sign of Teacher **Name of Student.**

---------- XOX ----------

COURSE CURRICULUM FOR THIRD PROFESSIONAL BAMS
(PRESCRIBED BY NCISM)



Prasuti Tantra evam Stree Roga
(Gynecology and Obstetrics)

(SUBJECT CODE : AyUG-PS)

(Applicable from 2021-22 batch, from the academic year 2024-25 onwards for 5 batches or until further notification by NCISM, whichever is earlier)

ncism

।। आयुषे सर्वलोकानाम् ।।

BOARD OF AYURVEDA
NATIONAL COMMISSION FOR INDIAN SYSTEM OF MEDICINE
NEW DELHI-110026

NCISM

III Professional Ayurvedacharya (BAMS)

Subject Code : AyUG-PS

Prasuti Tantra evam Stree Roga
(Gynecology and Obstetrics)

Summary

Total number of Teaching hours: 275			
Lecture (LH) - Theory		**100**	**100(LH)**
Paper I	50		
Paper II	50		
Non-Lecture (NLHT)		**52**	**175(NLH)**
Paper I	26		
Paper II	26		
Non-Lecture (NLHP)		**123**	
Paper I	62		
Paper II	61		

Examination (Papers & Mark Distribution)

Item	Theory Component Marks	Practical Component Marks			
		Practical	**Viva**	**Elective**	**IA**
Paper I	100	100	60	10 (Set-TA)	30
Paper II	100				
Sub-Total	200	200			
Total marks	400				

Important Note :- The User Manual III BAMS is a valuable resource that provides comprehensive details about the curriculum file. It will help you understand and implement the curriculum. Please read the User Manual III before reading this curriculum file. The curriculum file has been thoroughly reviewed and verified for accuracy. However, if you find any discrepancies, please note that the contents related to the MSE should be considered authentic. In case of difficulty and questions regarding curriculum write to **syllabus24ayu@ncismindia.org**

PREFACE

The Indian government introduced the National Education Policy with the aim of transforming India into a knowledge-based society by providing quality education to all.

Prasuti Tantra and Stree Roga is a comprehensive and integral subject that equips students with the knowledge and skills required for the effective care of women throughout their life stages with special emphasis on reproductive health & management of pregnancy, child birth & postpartum care.

The curriculum is designed to develop a strong foundation in Ayurvedic concepts related to women's health, combined with contemporary medical knowledge, making it a dynamic and interdisciplinary subject.

In this competency based curriculum the syllabus has been crafted by blending traditional teachings & guidance with the latest scientific advancements to create a comprehensive & relevant educational experience. There is a conscious effort to incorporate a variety of innovative learning methods to ensure more practical education.

Innovative teaching methodologies, including problem-based learning (PBL), case-based learning (CBL), and simulation-based training, are integrated to encourage clinical reasoning, critical thinking, and application of theoretical knowledge. These methods help in honing the competencies necessary for handling real-life situations in Prasuti Tantra and Stree Roga practice. Vertical and horizontal integration with other subjects ensures a seamless learning process and prepares students for interdisciplinary care delivery.

Incorporating student-centric and activity-based learning, the curriculum also focuses on building competencies in areas such as patient interaction, clinical examination, diagnostic decision-making, and treatment planning. Dedicated time for clinical exposure, self-directed learning, peer learning, community outreach programs, and surveys on women's health helps students understand the diverse range of health issues faced by women across different demographics.

The curriculum is aligned with Competency-Based Dynamic Curriculum (CBDC) aims to produce confident, skilled practitioners who can diagnose and treat women's health issues effectively, keeping in mind the ancient wisdom of Ayurveda and the advances in contemporary medicine. Through traditional and modern assessment methods, students will be regularly evaluated to ensure they achieve the desired learning outcomes, contributing to both their academic success and professional development.

By the end of this course, students will not only be well-versed in Ayurvedic approaches but also adapt in contemporary medical practices, enabling them to provide high-quality, integrated healthcare to women.

INDEX

Course Code and Name of Course 5
Table 1 : Course learning outcomes and mapped PO 5
Table 2 : Contents of Course 6
Paper 1 6
Paper 2 10
Table 3 : Learning objectives of Course 17
Paper 1 17
Paper 2 61
Table 4 : NLHT Activity 112
Table 5 : List of Practicals 115
Table 6 : Assessment Summary: Assessment is subdivided in A to H points 121
6 A : Number of Papers and Marks Distribution 121
6 B : Scheme of Assessment (Formative and Summative) 121
6 C : Calculation Method for Internal assessment Marks 121
6 D : Evaluation Methods for Periodical Assessment 122
6 E : Question Paper Pattern 123
6 F : Distribution of theory examination 124
Paper 1 124
Paper 2 124
6 G : Instructions for UG Paper Setting & Blue print 126
6 H : Distribution of Practical Exam 127
References Books/ Resources 129
Syllabus Committee 132
Abbreviations 137

Course Code and Name of Course

Course code	Name of Course
AyUG-PS	Prasuti Tantra evam Stree Roga

Table 1 : Course learning outcomes and mapped PO

SR1 CO No	A1 Course learning Outcomes (CO) AyUG-PS At the end of the course AyUG-PS, the students should be able to-	B1 Course learning Outcomes mapped with program learning outcomes.
CO1	Explain anatomy, physiology, neuro-endocrinology of reproduction and implement *Garbhini Paricharya* (Antenatal care), *Garbha Samskara* to achieve *Shreyasi Praja* (healthy progeny) and minimize maternal morbidity and mortality.	PO1,PO4,PO5
CO2	Explain *Youvanavastha*(Puberty), *Kishoravastha*(Adoloscence) and Rajonivrutti (Menopause). Diagnose *Yonivyapad* (Gynecological disorders), *Artava vyapad* (Menstrual disorders), *Vandhyatva* (Infertility), *StanaRoga* with integration of Ayurveda principles and Scientific advances for holistic management.	PO1,PO3
CO3	Perform *Sthanika upakrama* (in-situ treatment), *Panchakarma* and Surgical procedures and implement drug interventions ethically ensuring patient safety.	PO2,PO4,PO5
CO4	Perform Normal labor, anticipate Obstetric emergencies and ensure timely referral. Manage *Sutika* (normal puerperium) and *Sutika Vyapad* (abnormal puerperium). Postpartum counseling on contraceptives.	PO2,PO3,PO6
CO5	Participate in National maternal health programs and comprehend the medicolegal aspects related to *Prasuti tantra and Stree Roga* including the MTP ACT and PC-PNDT ACT.	PO6,PO7
CO6	Demonstrate professional ethics, communication skills with compassionate attitude, engage in clinical research embracing the principles of lifelong learning and professional development.	PO6,PO8,PO9

Table 2 : Contents of Course

Paper 1 (PRASUTI TANTRA - OBSTETRICS)						
Sr. No	**A2 List of Topics**	**B2 Term**	**C2 Marks**	**D2 Lecture hours**	**E2 Non-Lecture hours Theory**	**E2 Non-Lecture hours Practical**
1	**Stree Vishishta Shareera Vigyana - Anatomy of Female Reproductive System** a. Introduction to *Prasuti Tantra* and *Stree Roga*. Origin of word "*Stree*" with nomenclature. (*Vayobheden Stree sangya*) b. *Tryavarta Yoni* and anatomical insights of *Garbhashaya* with *marma, peshi*. c. *Artavavaha* and *Stanyavaha Srotas*. d. Anatomy of Female internal and external genital organs with applied aspects. e. *Streeshroni* (Female Pelvis) -Types, Diameters and Obstetric significance.	1	30	3	2	4
2	**Rutuchakra - Menstrual Cycle** a. *Shuddha Artava* & *Shuddha Shukra Lakshana*. b. *Tridosha* & *Panchamahabhoota* in *Rutuchakra*. c. Practices of *Rajaswala Paricharya* and its potential effects on reproductive health. d. *Rutukala, Rutumati Lakshana* and *Rutumati Paricharya* with significance. e. Highlights on *Beeja Nirmana* - Oogenesis, Spermatogenesis. f. *Rutuvyatita Kala.* g. Phases of Menstrual cycle. Importance of HPO axis in menstrual regulation.	1		1	4	1
3	**Garbha Vigyana - Embryology & Fetal Development**	1		4	4	4

	a. *Garbhakara Bhava, Garbhadhana, Garbhavakranti, Garbha Samskara, Pumsavana Samskara* for achieving *Shreyashi-praja*. b. *Apara* (Placenta) and *Garbha Nabhinadi* (umbilical cord), *Garbhodaka* (amniotic fluid) - formation with abnormalities c. *Garbha Poshana* d. Fetal nourishment and Fetal circulation. e. *Masanumasika Garbha Vriddhi* f. *Garbhashayantara Garbha Sthiti* (Fetus-in-utero) - Lie, Attitude, Presentation, Presenting part, Denominator, Position.					
4	**Garbhini Vigyana - Physiology of Pregnancy & Antenatal Care** a. *Garbhini Nidana – Garbhini Lakshana, Garbha-Upaghatkara bhava, Garbha Vikruti.* b. Physiological changes and Diagnosis of Pregnancy. c. *Garbhini Paricharya, Prajasthapana gana.* d. Antenatal care – Objectives, Immunization, Examination, Investigations and Management with contemporary National protocol. e. Demographic statistics related to Obstetrics.	1		3	3	8
5	**Garbha Vyapad - Fetal Pathologies** a. *Garbha Srava, Garbha Pata - Nidana, Samprapti, Lakshana, Chikitsa.* b. Abortion, Medical Termination of Pregnancy Act (MTP Act). c. *Garbha Vyapad – Nidana, Samprapti, Lakshana, Chikitsa.* d. Intrauterine Growth Restriction, Oligohydramnios, Polyhydramnios—Etiological factors, Clinical features, Management.	2	40	4	4	7

	e. Rh incompatibility, ectopic pregnancy, gestational trophoblastic disease. f. *Antarmruta Garbha – Nidana, Samprapti, Lakshana, Chikitsa.* g. Intrauterine Fetal Demise—Etiological factors, Clinical features, Management. h. *Raktagulma—Nidana, Lakshana, Chiktisa.*					
6	**Garbhini Vyapad - Minor Ailments and Major Disorders of Pregnancy** a. *Garbhini Vyapad – Aruchi, Hrillasa, Chardhi, Vibanda, Atisara, Arsha, Parikartika, Udavarta* b. *Vaivarnya, Kandu, Kikkisa, Pandu, Garbhini Jwara, Shotha.* c. Hypertensive Disorders in Pregnancy. d. High risk Pregnancy. e. *Prasava poorva rakta srava* (Ante Partum Hemorrhage) – Causes, Classification, Clinical features, Management.	2		6	0	6
7	**Prasava Vigyana - Labour** a. *Sutikagara* and Labour Room setup, Labour Room Protocol according to contemporary National Health Guidelines. b. Drugs commonly used during Labour (Uterotonics, Tocolytics, Analgesics, Ergot Alkaloids and Anesthetics) - Guidelines for use with Pharmacotherapeutics. c. *Prasava Paribhasha, Prasava Hetu, Prasava Kala*. d. Causes of onset, Physiology and Diagnosis of Labour. e. Anatomy of Fetal Skull and Clinical Pelvimetry. f. *Prajayini, Upasthita Prasava* and *Asanna Prasava*.	2		10	1	17

	g. Stages of Labour and Mechanism of Labour. h. *Avi, Grahishoola, Prasuti maruta* and *Garbha Sthiti Parivartana* during *Prasava Kala*. i. *Prasava Paricharya* - Monitoring with Partograph and management of Labour. j. Episiotomy. k. Intrapartum Fetal Monitoring techniques, Non Stress Test, Fetal Distress. l. *Jatamatra Paricharya* (Immediate care & Resuscitation of Newborn).					
8	**Prasava Vyapad - Labour Complications & Obstetric Emergencies.** a. *Nidana, Samprapti, lakshana* and *Chikitsa* of *Akala Prasava* (Preterm labour) b. Post term pregnancy c. *Garbha Sanga, Vilambita Prasava.* d. Obstructed and Prolonged labour. e. *Apara sanga - Nidana, Lakshana and Chikitsa.* f. Post Partum Haemorrhage - Causes, Clinical features, Complications and Management.	3	30	6	2	4
9	**Moodhagarbha - Obstructed Labour** a. *Nirukti, Samprapti, Bheda, Gati, Chikitsa* of *Moodhagarbha.* b. Abnormal Presentations – Breech, Persistent Occipito Posterior Position. c. Cephalo Pelvic Disproportion (CPD). d. *Moodhagarbha Upadrava – Garbhakosha-parasanga, Makkala, Yonisamvarana.* e. Obstetric Emergencies with timely referral - Cord prolapse, Genital Tract Injuries during labour, f. Uterine -inversion, Amniotic fluid Embolism,	3		8	3	6

	Obstetric Shock, Uterine Rupture. g. Induction and Augmentation of Labour and Assisted Labour Techniques. (Forceps, Vacuum, Caesarean Section).					
10	**Sootika Vigyana - Puerperium** a. *Sootika, Sootika-kala, Sootika Paricharya*. b. Puerperial changes, Postpartum care. c. Contraception d. *Sootika Vyapad – Nidana, Samprapti, Lakshana, Chikitsa.* e. Puerperial Disorders.	3		3	1	3
11	**Stanya Vigyana - Lactation** a. *Stanya, Stanya Sampat.* b. Physiology of Lactation, Breast feeding techniques. c. *Stanya dushti, Stana Shotha, Stana Vidradhi.* d. Mastitis, Breast abscess.	3		2	2	2
Total Marks			**100**	**50**	**26**	**62**

Paper 2 (STREE ROGA - GYNAECOLOGY)						
Sr. No	**A2 List of Topics**	**B2 Term**	**C2 Marks**	**D2 Lecture hours**	**E2 Non-Lecture hours Theory**	**E2 Non-Lecture hours Practical**
12	**Stree Prajanananga Nirmana and Vikruti - Development of Female Reproductive System with Anomalies.** a. Development of female reproductive system from Mullerian duct and its anomalies. b. Neuroendocrinology of reproduction.	1	30	3	2	4

	c. Anatomy and Physiological aspects of Puberty and Menopause.					
13	**Yantra evam Shastra - Instruments** Instruments commonly used in *Prasutitantra* (Obstetrics) and *Stree Roga* (Gynaecology) procedures and surgeries - a. Types of *Yantra* (Blunt instruments) and utilization- i) *Sandansha Yantra* (Pincer like or dissecting forceps) – * *Annigraha* – plain non toothed forceps * *Sannigraha* – Toothed forceps ii) *Swastika Yantra* (Cruciform like Forceps) - Allies forceps, Vulsellum, Sponge holding forceps, Cheatle's forceps, Kocher's forceps, Babcock's forceps, Needle holder, Artery forceps, Ovum forceps, Green armytage forceps, Cervical punch biopsy forceps. iii) *Shalaka Yantra* (Rod like instruments) - Uterine sound, Hegar's dilator, Uterine curette, Endometrial biopsy curette, *Agnikarma Shalaka*, Anterior vaginal wall retractor iv) *Dvi Tala Yantra* (Scoops or spoon-shaped instruments) - Sim's speculum, Endometrial curette, Cusco's speculum, Doyen's retractor, Obstetric forceps v) *Nadi Yantra* (Tubular instruments) - *Yonivranekshana yantra*, Leech Wilkinson's HSG cannula, Rubin's cannula, Suction cannula, *Uttarabasti* cannula, Vaginal douching syringe, *Basti yantra* b. Type of *Shastra* (Sharp instruments) and utilization - i) *Kartari Shastra* (Scissors) - *Atimukha Shastra* (Episiotomy Scissors), *Mandalagra Shashtra* (Umbilical cord cutting Scissors), *Shararimukha Shastra* (Mayos scissors / Simple scissors, suture removing scissors)	1		1	1	6

	ii) *Vriddhipatra Shastra* – Scalpel iii) *Suchi Shastra* – different type of needles					
14	**Stree Rugna Parikshana - Gynaecological Examination** a. Gynaecological History taking. b. General and systemic examination. c. Breast examination, Per abdomen, Per speculum, Per vaginal, Per rectal examination.	1		2	1	4
15	**Artava Vyapad - Menstrual Disorders** a. *Ashtartava Dushti*. b. *Anartava* (Amenorrhoea). c. Poly Cystic Ovarian Syndrome (PCOS). d. *Artava Kshaya* (Oligomenorrhoea, Hypomenorrhoea). e. *Artava Vruddhi* (Polymenorrhoea). f. *Asrugdara* (Abnormal Uterine Bleeding).	1		6	2	4
16	**Rajonivritti - Menopause** a. Anatomical & Physiological changes in Genital organs during Menopause. b. *Rajonivrutti Janya Lakshana* (Menopausal Syndrome). c. Management of Menopausal syndrome. d. Role of *Rasayana* in Menopausal syndrome.	1		2	1	2
17	**Yoni Vyapad - Disorders of Female Reproductive system** a. *Yoni vyapad - Bheda, Nidana, Samprapti, Lakshana, Upadrava, Samanya* & *Vishesha Chikitsa*. b. *Udavarta, Vandhya, Vipluta, Paripluta,Vatala, Rudhirakshara, Vamini, Sramsini, Putraghni, Pittala,*	2	40	13	3	10

	c. *Atyananda, Karnini, Acharana, Aticharana, Shleshmala, Shandhi,* d. *Phalini, Mahati, Soochivaktra, Sarvaja, Antarmukhi, Shuska, Arajaska, Lohita kshaya, Upapluta.* e. Dysmenorrhoea, Pruritus Vulvae, Endometriosis, Adenomyosis, Pelvic Inflammatory Diseases, f. Pelvic organ prolapse, Cervical erosion and Ectropion, Dyspareunia, Vaginismus, Presacral neuralgia, Constitutional nymphomania, Effluvium seminis - Causes, Clinical features, Investigations and Management.					
18	**Vandhyatwa - Infertility** a. *Nirukti* and *Bheda* of *Vandhyatwa.* b. Female and Male factors of infertility. c. Infertility Evaluation - Semen Analysis, Hormonal assays, Follicular study, Ultrasonography & Hysterosalpingography d. *Chikitsa* of *Vandhyatwa – Shodhana, Shamana* and *Sthanika upakrama* e. Assisted Reproductive Techniques.	2		4	3	8
19	**Vyadhi Vinischaya Upaya - Diagnostic Tools and Techniques** a. Pap smear b. Colposcopy c. Cervical biopsy d. Endometrial biopsy e. Hysterosalpingography f. Ultrasonography g. Hysteroscopy h. Laparoscopy	2		1	1	2

	i. Magnetic Resonance Imaging j. Computed Tomography scan					
20	**Sthanika Upakrama - In situ Treatment Modalities** *Sthanika Upakrama - Yoni Dhavana, Yoni Prakshalana,Yoni Pichu,Yoni Varti,Yoni Lepana, Yoni Avachurnana, Yoni Purana, Yoni Dhoopana, Dahana, Ksharkarma, Uttarbasti.*	2		1	2	7
21	**Stree Jananganga Granthi Evam Arbuda - Benign & Malignant lesions of Female Reproductive System** a. *Yonikanda,Yoni Arsha.* b. Benign lesions of reproductive system - Fibroid uterus, Bartholin cyst, Endometrial and Cervical polyp, Ovarian cyst, Tubo ovarian mass. c. *Arbuda* d. Premalignant & Malignant lesions of Uterus, Cervix, Endometrium & adnexa - Aetiology, Evaluation, Staging, Management e. Preventive aspects of Malignancies. f. Vaccination for cervical cancer.	3	30	4	2	4
22	**Guhya Roga - Sexually Transmitted Diseases** a. *Upadamsha, Firanga, Puyameha - Nidana, Samprapti, Lakshana, Chikitsa.* b. Sexually Transmitted Infections.- Causative microorganisms, Pathology, Clinical features, Investigations and Treatment.	3		2	1	0
23	**Yoni srava - Vaginal Discharge** a. *Shweta pradar - Nidana, Lakshana* and *Chikitsa.* b. Differential Diagnosis of Abnormal Vaginal Discharge and management.	3		1	1	2
24	**Stana Roga - Breast Disorders** a. Clinical Anatomy of Breast.	3		3	1	3

	b. *Stana Keelaka, Stana Granthi - Nidana, Samprapti Lakshana, Bheda, Upadrava* & *Chikitsa* c. Fibroadenoma Breast. d. *Stanarbuda* - Breast carcinoma. e. Aetiology, Clinical features, Diagnosis, Staging, Prevention & Management.					
25	**Shastra Karma in Stree Roga - Surgical Procedures in Gynaecology** a. Sterilization methods of Instruments, Equipments and Labour - OT complex. b. *Garbhashaya Mukha Vistrutikarana evam Lekhana* (Dilatation & Curettage). c. *Garbhashaya Mukha Dahana* (cauterization). d. *Vandhya karana* (Sterilization) – Tubectomy & Vasectomy. e. *Udaramarga Garbhashaya Nirharana* (Abdominal hysterectomy). f. *Yonimarga Garbhashaya Nirharana* (Vaginal hysterectomy). g. *Arbudanirharana* (Myomectomy). h. *Granthinirharana* (Cystectomy). i. *Arshanirharana* (Polypectomy).	3		4	1	4
26	**Stree Roga Sambandhi Aushadhi- Classical Formulations** a. *Vishista-Phalashruti* (Specific indication) of following formulations - b. *Churna Kalpana - Pushyanuga Churna, Shatpushpa Churna, Shatavari Churna, Nagakeshara Churna.* c. Ghrita Kalpana - Phalaghrita, Kashmaryadi Ghrita, Vidaryadi Ghrita. d. *Taila Kalpana - Dahtakyadi Taila, Shatpushpa*	3		1	1	0

	Taila, Jatyadi Taila, Narayana Taila. e. *Asava and Arishta - Ashokarishta, Kumaryasava.* f. *Rasa aushadhi - Rajahpravartini Vati, Pratapalankeshwar Rasa, Garbhapala Rasa, Pushpadhanva Rasa.* g. *Kwatha - Nyagrodhadi kwatha, Dashmoola Kwatha, Panchavalakala Kwatha.* h. *Paka Kalpana - Sobhagya Shunthi Paka, Puga Khanda/ Puga Paka.* i. *Avaleha - Jeerakavaleha, Kushmandavaleha*					
27	**National Maternal Health Programs** a. Family planning. b. Reproductive and Child Health c. '*Janani Suraksha Yojana'* d. '*Janani Shishu Suraksha Karyakram'* e. '*Pradhan Mantri Surakshit Matritva Abhiyan'* f. 'Mission Indradhanush' g. 'Menstrual Hygiene Scheme' h. 'LaQshya programme'	3		1	2	0
28	**Medical ethics, Record keeping and Audit in Obstetrics and Gynaecology** a. Medical ethics. b. Medical record documentation – Informed Consent, Birth & Death registration, Issuing Medical Certificate c. Audit in Obstetrics and Gynaecology.	3		1	1	1
Total Marks			**100**	**50**	**26**	**61**

Table 3 : Learning objectives of Course

Paper 1 (PRASUTI TANTRA - OBSTETRICS)										
A3 Course out come	**B3 Learning Objective (At the end of the session, the students should be able to)**	**C3 Domain/sub**	**D3 MK / DK / NK**	**E3 Level**	**F3 T-L method**	**G3 Assessment**	**H3 Assessment Type**	**I3 Term**	**K3 Integration**	**L3 Type**
Topic 1 Stree Vishishta Shareera Vigyana - Anatomy of Female Reproductive System (LH :3 NLHT: 2 NLHP: 4)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO1	Explain the origin of the word "*Stree*" with nomenclature and classification based on age (*Vayobhedena Stree Sangya*).	CK	MK	K	L&PPT	VV-Viva	F&S	I	-	LH
CO1	Demonstrate the anatomy of female reproductive organs - *Tryavarta Yoni, Garbhashaya, Stree vishista Marma* & *Peshi*.	CAP	MK	SH	D,D-M	PP-Practical,P-VIVA,VV-Viva	F&S	I	-	NLHP1.1
CO1	Enumerate and describe *Stree vishista Rachana Shareera -Tryavarta Yoni, Garbhashaya, Stree vishista Marma* and *Peshi*.Describe *Artava vaha srotas* and *Stanya vaha srotas with Viddha Lakshana.*	CC	MK	K	L&PPT	S-LAQ,P-VIVA	F&S	I	-	LH
CO1	Demonstrate the spatial orientation and positioning of the female reproductive organs within pelvic cavity and role of ligaments.Demonstrate Blood supply to the Uterus, Adnexa and Pelvic floor.	CAP	MK	SH	D-M,D	P-EXAM	F	I	-	NLHP1.2
CO1	Describe external genital organs and Internal genital organs with applied clinical aspects.	CC	MK	K	L&PPT,CBL	P-VIVA,INT,P-EXAM,S-LAQ	F&S	I	-	NLHT1.1
CO1, CO4	Demonstrate landmarks of true pelvis, false pelvis, inlet, cavity, outlet with diameters of Obstetric importance and their measurements.	CAP	MK	SH	D-M	P-MOD,VV-Viva,P-VIVA	F&S	I	-	NLHP1.3

CO1	Describe *Stree Shroni - Asthi, Sandhi, Parimana and* highlight difference with *Purusha Shroni.*	CC	MK	K	L&PPT	S-LAQ,VV-Viva,P-VIVA,P-MOD	F&S	I	-	NLHT1.2
CO1, CO4	Classify Female Pelvis. Describe Obstetric measurements with clinical importance.	CC	MK	KH	L&PPT	VV-Viva,P-VIVA,S-LAQ	F&S	I	-	LH

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 1.1	Anatomy of female genital organs	**(1 hr)** Teacher will demonstrate Normalcy and abnormalities in Female external genital organs - vulva, labia majora, labia minora, clitoris and vestibule with videos or images and explain clinical importance. Normalcy and abnormalities in internal female genital organs - vagina, cervix, uterus, fallopian tubes and ovaries with videos or images and explain clinical importance. Encourage students to relate anatomical positioning to clinical conditions.
NLHT 1.2	*Asthi, Sandhi* and *Parimana* of *Stree Shroni*	**(1 hr)** Teacher will demonstrate *Asthis in Stree Shroni* - Guda, Bhaga, Nitamba, Trika, Shroniphalaka. *Sandhis - Tunnasevani and Samudga* in *Stree Shroni*. Discuss A*ngula Parimana* with comparative study of *Purusha Shroni*.

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 1.1	*Tryavarta Yoni*	**(1 hr)**

		Teacher will orient students on anatomy of female reproductive system and demonstrate anatomical co-relations of *Tryavarta yon*i on model - A) 1. vagina with adnexal structures 2. cervix with adnexal structures 3. uterus with adnexal structures B) 1. introitus 2. mid-canal 3. fornices C) 1. Thick connective and fibrous layers separating vaginal canal from urinary bladder and urethra anteriorly & rectum and anus posteriorly. 2. Muscular layer 3. Mucous layer D) 1. External genitalia 2. Vagina 3. Uterus with adnexa E) 1. Submeatal sulcus 2.Transeverse vaginal sulcus 3. Bladder sulcus Locate *Garbhashaya* on model and understand with respect to description given by Acharya Sushrut and Kashyap. Locate *Stree Vishista Peshis* and *marmas* on model and understand their importance. Divide students into small groups and student will immitate the demonstration - Provide each group with anatomical models of the female reproductive system - uterus with adnexa models. Students will identify and demonstrate structures namely *Avarta of Yoni, Garbhashaya, and marma,*

		stree vishista peshi and srotas.
NLHP 1.2	Spatial orientation and Blood supply of uterus and adnexa	**(1 hr)** Teacher will use anatomical models to demonstarte - Blood supply to the uterus, ovaries, and fallopian tubes. Detailed structure of the pelvic floor muscles and their clinical importance. Ligaments and their role in pelvic support. Group Activity - Divide students into small groups, Provide each group a pelvic model and chart showing the vascular and ligamentous connections. Instruct groups to debrief - the arterial and venous supply to the uterus and adnexa. Identify the spatial orientation of pelvic organs in relation to each other. Spatial Orientation Exercise - Use cross-sectional images or models to demonstrate how reproductive organs are positioned within the pelvic cavity. Students will practice positioning models accurately to demonstrate version and flexion of uterus.
NLHP 1.3	Female bony pelvis	**(2 hrs)** Teacher will demonstrate on bony pelvis model - Boundaries of True & false pelvis. Dimensions of the pelvic inlet - Plane, Axis, Antero-posterior diameter, Oblique diameter, Transverse diameter. Dimensions of Mid-Cavity - Axis, Diameter, Boundaries and Plane. Dimensions of Outlet - Antero-posterior diameter, Transverse diameter, Pubic arch angle, Waste space of Morris. Pictorial Demnstration of types of pelvis - Gynecoid, Android, Anthropoid and Platypelloid. The student will imitate demonstration on model, describe the importance of obstetric diameters.
Topic 2 Rutuchakra - Menstrual Cycle (LH :1 NLHT: 4 NLHP: 1)		

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2	Define *Raja, Artava, Shukra.* Describe *Shuddha Artava* & *Shuddha Shukra Lakshanas* with clinical significance.	CC	MK	K	L&GD	VV-Viva	F&S	I	-	NLHT2.1
CO1	Explain the role of *Tridosha* and *Panchamahabhoota* in *Rutuchakra* (Menstrual cycle)	CC	MK	K	L&GD	VV-Viva	F&S	I	-	NLHT2.2
CO1	Explain the phases of the menstrual cycle and the role of hypothalamo-pituitary-ovarian axis in its regulation.	CC	MK	K	L&PPT	VV-Viva,S-LAQ,P-VIVA	F&S	I	-	LH
CO1	Explain physiology of Menstruation and phases of Menstrual cycle.	CAP	MK	K	FC	CL-PR,VV-Viva,P-VIVA	F&S	I	-	NLHT2.3
CO1	Demonstrate dietary recommendations and other practices with potential health benefits of *Rajaswala Paricharya.*	CAP	MK	KH	D,RP	VV-Viva	F&S	I	-	NLHP2.1
CO1	Describe *Rutumati Lakshana and Paricharya.*	CAP	MK	K	L&GD, DIS,PER	VV-Viva,CL-PR,PRN	F&S	I	-	NLHT2.4

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 2.1	Concept of *Raja, Artava and Shukra.*	**(1 hr)** Teacher will facilitate presentation, discussion and clarification of the concept, dividing students into small groups and assign each group with one of topics - '*Raja, Artava and Shukra'.* Teacher will ensure discussion of *Shuddha Artava* & S*huddha Shukra Lakshanas* and their clinical significance. Peer discussion on the concept of *Stree Shukra* followed by interaction with students.

NLHT 2.2	*Tridosha* and *Panchamahabhuta* in *Rutuchakra*.	**(1 hr)** Teacher will give presentation and have discussion with students, on G*unas* of *Tridosha* and *Panchamahabhut* in correlation with different phases - *Rajasrava Kaala, Rutukala* and *Rutu Vyateeta Kala* with focus on physical, mental, and emotional manifestations. Students will have discussion on cases of irregular menstrual cycles and abnormal menstruation with respect to imbalance of *Doshas, Mahabhutas* and *Gunas* involved.
NLHT 2.3	Physiology of Menstruation.	**(1 hr)** Flipped Classroom - Students will review reading material before class and during class-presentation they will create flow chart / present with diagrams of hormonal regulation of different phases of menstrual cycle followed by peer discussion. Teacher will encourage students to analyze different case scenarios of menstrual irregularities and identifying which phase of the menstrual cycle is affected and how the HPO axis dysfunction contributes.
NLHT 2.4	Importance of *Rutukala*	**(1 hr)** Teacher will discuss the significance of *Rutukala* with physiology of Ovulation. Explain *Rutumati Lakshana* and enumerate *Rutumati Paricharya* (practices to be followed) for successful conception & the process of *Beeja Nirmana* (gamete formation-spermatogenesis and oogenesis) in Ayurveda and contemporary science. Class presentation by students on spermatogenesis and oogenesis followed by peer discussion.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 2.1	*Rajaswala paricharya*	**(1 hr)** Teacher will discuss and analyze role of various components - *Ahara, Vihara* and *Sadvrutta* of *Rajaswala Paricharya* through role play & Interaction. Student will demonstrate and explain the benefits of dietary recommendations with analysis of

		techniques that help to balance *Vata dosha* during menstruation aligning with recommendations in *Rajaswala Paricharya* (menstruating women).

Topic 3 Garbha Vigyana - Embryology & Fetal Development (LH :4 NLHT: 4 NLHP: 4)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1	Define *Garbha* and explain the process of *Garbhadhana* (conception) and *Garbhavakranti* (chronological evolution of *Garbha*), describe *Garbha-kara shad-bhavas* (factors influencing development and traits of fetus).	CC	MK	KH	L&GD, PER,FC	S-LAQ,T-OBT,CL-PR, P-REC,P-VIVA	F&S	I	-	NLHT3.1
CO1	Explain the importance of pre-conception care and factors promoting conception.	CAP	MK	KH	L&PPT	S-LAQ,VV-Viva	F&S	I	-	LH
CO1	Explain significance of *Garbha Samskara* and *Pumsavana Samskara* for achieving *Shreyasee-Praja* - Fetal optimisation (physical, mental and emotional development of fetus).	CAP	MK	K	CBL,SIM,RP,D,W	P-PRF,VV-Viva,S-LAQ,P-EN	F&S	I	V-SW	NLHP3.1
CO1	Describe the formation and functions of *Apara* (placenta with membranes), *Garbha Nabhinadi* (umbilical cord), and *Garbhodaka* (amniotic fluid)	CC	MK	K	L&PPT	VV-Viva,QZ ,S-LAQ	F&S	I	-	LH
CO1	Describe *Apara, Nabhinadi* and *Garbhodaka Vikaras* (abnormalities of placenta, umbilical cord and amniotic fluid) with clinical significance.	CAN	MK	K	D-M,CD,CBL, PBL,LRI	P-PS,S-LAQ,P-ID,VV-Viva	F&S	I	-	NLHT3.2
CO1	Describe *Garbha Vriddhikara Bhava* (factors affecting fetal growth) and *Garbha Poshana* (mechanisms of fetal nourishment). Illustrate fetal circulation along with utero- placental and feto-placental circulation.	CC	MK	K	L&PPT ,D-M,D,FC	M-CHT,VV-Viva,COM,QZ ,S-LAQ	F&S	I	-	NLHT3.3
CO1	Explain *Masanumasika Garbha Vriddhi* (Month wise fetal growth	CC	MK	K	PER,L_	P-REC,S-L	F&S	I	-	NLHT3.4

	and development)				VC,D-M	AQ,COM,PA				
CO1	Explain *Garbhashayantara Garbha Sthiti*.	CC	MK	K	L&PPT	P-MOD,S-LAQ,P-PRF,VV-Viva	F&S	I	-	LH
CO1, CO4	Demonstrate *Garbhashayantara Garbha Sthiti* (fetus -in utero).	PSY-SET	MK	SH	CBL,D,CD,D-M,D-BED	VV-Viva,P-EXAM,P-VIVA,OSCE,P-PRF	F&S	I	-	NLHP3.2
CO1, CO4	Describe fetus-in-utero - Lie, attitude, presentation, presenting part, denominator and position.	CC	MK	K	L&PPT,D-M	P-MOD,OSCE,VV-Viva,S-LAQ	F&S	I	-	LH

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 3.1	*Garbha* and *Garbhavakranti*	**(1 hr)** Student will present and discuss *Garbha Kara Shad Bhavas* in conception and guidelines of *Garbhadhana Vidhi* during classroom presentation with flow charts. Teacher will explain components of *Garbhavakranti* with applied clinical aspects - *Anupahata Retus, Apradushta Yoni, Shonita and Garbhashaya.*
NLHT 3.2	*Apara, Nabhinadi* and *Garbhodaka Vikaras* (abnormalities of placenta, umbilical cord and amniotic fluid) with clinical significance.	**(1 hr)** Teacher will demonstrate abnormal conditions related to following, on models / charts / specimen / clinical case / videos - 1. Placenta - formation, location, shape, size and implantation,

		2. Umbilical cord - structure, characteristics, length and attachment, 3. Amniotic fluid – volume and colour Student will be given case scenarios to discuss clinical consequences and strategies to improve pregnancy outcome.
NLHT 3.3	*Garbha Poshana* (fetal nourishment) and *Garbha Vridhhikara Bhava.*	**(1 hr)** Flipped class - Students will be encouraged to review the literatures related to different methods of *Garbhaposhana* (*Upasneha, Upasweda,*through *Nabhinadi*) during different stages of intra uterine development with utero- placental and feto-placental circulation and make compilation. Teacher will summarize concepts of *Garbhaposhana* with theories of *Upasneha, Upasweda, Apara* and *Garbha Nabhinadi* (fetal Circulation) with utero- placental and feto-placental circulation and discuss the importance of *Garbha Vriddhikara bhava* (factors affecting fetal growth).
NLHT 3.4	Month wise fetal development	**(1 hr)** Teacher will explain the stages of *Masanumasika Garbha Vriddhi* - month wise developement of fetus and demonstrate on model/ videos/ charts/ specimen. Student will analyze the mile-stones of fetal developement and recite the shlokas of *Masanumasika Garbha Vriddhi.* Teacher will assign compilation work to students.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 3.1	*Garbha Samskara* and *Pumsavana Samskara*.	**(2 hrs)** Activity 1 (Garbha samskara) - Teacher will discuss the process and practices of *Garbha Samskara* for achieving *Shreyasee-Praja* and

		orient students to Pre-Conception and Pre-natal care. Discuss and provide clinical exposure to *Garbha Samskara* Practices - *Beejasamskara* (Preconceptional *Samsodhana* therapy) and special diet indications viz *Taila, Masha* to female and *madhura ousadha sidhha Ghrita, Ksheera* to male. Equip students with skill to advice couple desiring healthy progeny through garbhasamskara programme viz Dietary recomendations - *Garbhini Masanumasika pathya* (monthly regime). Prenatal *Yoga and Pranayam* : *yoga* postures and breathing techniques designed to promote physical and mental well-being during pregnancy under supervision of yoga instructor. Meditation and Chanting: meditation or chanting practices. Activity 2 (*Pumsavana* samskara for achieving *Shreyasee-praja*) - Teacher will explain the ritual of *Pumsavana Samskara* for achieving *Shreyasee-praja.* Demonstrate process of drug collection, ritual with time, preparation and procedure of administration indicated (nasally or orally), followed by the chanting of specific mantras. Student will observe and discuss the process and benefits.
NLHP 3.2	Fetus-in-utero	**(2 hrs)** Teacher will demonstrate with help of female pelvis and fetal skull/ model and dummy of fetus - Fetal Lie - longitudinal, transverse, oblique Fetal Attitude - flexed, deflexed, extended and hyper-extended Fetal Presentation - cephalic, breech, shoulder Fetal Presenting part - vertex, brow, face, mentum, breech, foot, compound Fetal Position - Occiput Anterior, Occiput Posterior, Left Occiput Anterior, Left Occiput Posterior, Right Occiput Anterior, Right Occiput Posterior, Left Occiput Transverse, Right Occiput Transverse. Denominator - Occiput, Mentum, Sacrum, Acromion. Student will practice the components of fetus in utero and demonstrate denominator and its relation with various quadrants of pelvis in determining fetal position.
Topic 4 Garbhini Vigyana - Physiology of Pregnancy & Antenatal Care (LH :3 NLHT: 3 NLHP: 8)		

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1	Explain the physiological changes during pregnancy and discuss maternal adaptations.	CC	MK	K	L&PPT	COM,S-LAQ,VV-Viva,P-VIVA	F&S	I	-	LH
CO1	Explain Garbhini Nidana and analyze Sadyogruhita Garbha, Vyakta Garbha Lakshanas, and the Clinical diagnosis of pregnancy in the first, second, and third trimesters based on signs and symptoms.	CAP	MK	KH	REC,L&PPT,CD	VV-Viva,S-LAQ,P-REC,P-VIVA,P-CASE	F&S	I	-	NLHT4.1
CO1	Identify and demonstrate pregnancy signs - Trimester wise.	CAP	MK	KH	D-M,CD,D-BED,SIM,L_VC	P-VIVA,SP,OSCE	F&S	I	-	NLHP4.1
CO1	Describe *Garbhopaghatakara Bhava* and *Garbha Vikruti*.	CC	MK	K	L&GD,CBL	VV-Viva,CBA,INT	F	I	-	NLHP4.2
CO1	Describe *Masanumasika Garbhini Paricharya* and importance of *Garbha Sthapaka Gana*.	CC	MK	K	L&PPT	P-VIVA,S-LAQ	F&S	I	-	LH
CO1	Describe Antenatal care as per National protocol.	CC	MK	K	L&PPT	P-VIVA,P-CASE,SP,S-LAQ,VV-Viva	F&S	I	-	LH
CO1, CO4	Screen & identify high risk pregnancy.	CAP	MK	KH	D-BED,DIS,L&PPT,CBL,CD	VV-Viva,SBA,P-VIVA,CBA	F	I	-	NLHT4.2
CO1,	Demonstrate Obstetric history taking and perform Antenatal	PSY-	MK	SH	SIM,CB	P-EXAM,S	F&S	I	-	NLHP4.3

CO4	Examination.	GUD			L,D-M, D-BED, CD	P,VV-Viva, P-VIVA,P-MOD				
CO1, CO5	Enlist routine investigations in pregnancy and know the role of Ultra sound in pregnancyBe familiarized with special diagnostic aids in pregnancy viz, double marker, triple marker, quadruple marker and Nonstress test.Analyze the provisions and limitations of PC PNDT act.	CAN	MK	KH	LRI,CD ,D-BED ,L&GD, PBL	VV-Viva,C BA,P-VIVA,SBA	F&S	I	-	NLHP4.4
CO1, CO5	Describe demographic statistics related to obstetrics - Maternal Mortality Rate, Maternal Morbidity, Infant Mortality Rate.	CC	MK	K	L&PPT ,BS	VV-Viva,C L-PR	F	I	-	NLHT4.3

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 4.1	*Garbhini Nidana*: Diagnosis of pregnancy	**(1 hr)** Teacher will explain *Garbhini Nidana* based on *Sadyogruhita Garbha* and *Vyakta Garbha Lakshanas.* Discuss clinical signs and symptoms related to diagnosis of pregnancy in first, second and third trimester. Student will recite shlokas and analyze the diagnosis of pregnancy based on clinical findings.
NLHT 4.2	High Risk Pregnancy	**(1 hr)** Teacher will discuss the alarming signs and methods of screening and identifying high risk pregnancy like multiple gestation, pregnancy induced hypertension, elderly primigravida, gestational diabetes etc. for timely referral to appropriate higher health care facility. Students will have peer discussion about high risk pregnancy cases.
NLHT 4.3	Demographic Statistics in Obstetrics	**(1 hr)** Teacher will facilitate the students with credible sources on current demographic statistics related to obstetrics - Maternal Mortality rate, Maternal Morbidity and Infant Mortality rate.

		Students will discuss the factors contributing to the statistical data (e.g., socioeconomic factors, healthcare access). Recent trends and initiatives to address issues related to ststatistics.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 4.1	Clinical Diagnosis of pregnancy	**(2 hr)** Teacher will demonstrate physical signs - Jacqemier's or Chadwick's, Osiander's, Goodell's, Hegar's, Piskack's and Palmer's signs, Chloasma, Montgomery's tubercle, Linea nigra, Stria gravidarum, Braxton-hicks contractions during clinical demonstration / demonstration on models and simulators/ Videos. Student will explain trimester wise signs of pregnancy.
NLHP 4.2	*Garbha Vikruti*	**(1 hr)** Teacher will explain *Garbha Upaghatakara Bhava* with effect on fetus. Students will be given case scenarios involving fetal deformities to analyze the possible *Garbha Upaghatakara Bhava* -maternal lifestyle, diet, stress and environmental exposure and discuss preventive measures.
NLHP 4.3	Antenatal History taking and Examination	**(4hrs)** Teacher will orient students to develop communication skill, identify risk factors, plan investigations and give appropriate advice for Antenatal cases. A. History taking in Pregnancy - 1. Patient particulars

2. Chief complaints – Complaints, their onset in chronological order (e.g.- complaints like Pain abdomen / Vaginal bleeding / Urinary problems / other minor complaints)

3. History of present illness: Elaboration of the chief complaints as regard to their onset, duration, severity, use of medications, investigations & progress. Trimester wise complications if any.

4. Past Pregnancy and Obstetric History : Gravida , Parity, Abortion, high risk pregnancy,Ectopic, Twins, mode of previous delivery ,Intrapartum complications, Post partum heamorrhage, Fetal morbidity, Fetal Death,

5. Menstrual History: Menarche (age), Last Menstrual Period (LMP), Regular /Irregular cycles

6. Naegele's formula - calculate Expected Date of Delivery (EDD)

7. History of Medications, Surgeries, Allergies

8. Family history : Parents & First degree relatives with a condition such as Diabetes, Multiple pregnancy, consanguineous marriage, bleeding dyscrasias, birth defects.

9. Personal History : Smoking, sleep, appetite , bowel & bladder habits.

B. Examination (on models / clinically)

1. General appearance and parameters viz, Height, Weight, Pallor, Jaundice, Oral cavity, Hair, Neck, Lymph nodes, edema, Varicosities, BP, Pulse, Temperature

2. Breast examination :Patient reclining, arms to the sides, breasts are inspected and palpated with flat of fingers of both hands

3. Systemic Examination: Respiratory system respiratory rate, Inspection & Auscultation of the

chest

Cardiovascular system : Inspect the chest , Auscultate heart sounds

4. Obstetric Examination

Pre-requisites: Verbal consent, Bladder evacuation, Proper exposure of abdomen from Xiphisternum to symphysis pubis
Woman in dorsal posture with thighs & knees slightly flexed
Stand on right side of the patient
Woman's head should be tilted to the left side

a. Inspection: Uterine shape, Contour of Uterus

Skin condition: Presence of Linea nigra, Striae gravidarum, presence of scar mark, infection

b. Palpation: Height of the uterus in terms of weeks

Symphysis - fundal height in cm to be measured with measuring tape.
Obstetric grips (Leopold's maneuvers) - Hands on practice on the manikin/real cases

i. Fundal grip

		ii. Lateral or Umbilical grip iii. First pelvic grip iv. Second pelvic grip (Pawlik's grip) c. Auscultation of Fetal Heart Sound (FHS) C. Case writing in prescribed journal proforma
NLHP 4.4	Investigations in pregnancy	**(1hr)** Teacher will elaborate planning routine and special investigations in pregnancy with provisions of PC & PNDT act. Narrate & Interpret routine and special investigations viz, double marker, triple marker, quadruple marker and Nonstress test with appropriate time of advice. Ultrasonography - Indications and interpretation of USG parameters during pregnancy. Early pregnancy scan, Nuchal Translucency Scan (NT), Targeted imaging for fetal anomaly (TIFFA) scan and growth scan in third trimester. Student can interpret various normal and abnormal investigation reports.

Topic 5 Garbha Vyapad - Fetal Pathologies (LH :4 NLHT: 4 NLHP: 7)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1	Define *Garbha Srava* and *Garbha Pata*. Explain *Nidana, Samprapti, Lakshana, and Chikitsa.*	CC	MK	K	L&PPT	P-REC,S-LAQ	F&S	II	-	LH
CO1,	Define Abortion and describe classification with aetiological	CC	MK	K	DIS,LRI	P-VIVA,S-	F&S	II	-	NLHT5.1

CO5	factors, clinical features, and investigations with medical and surgical management.				,L&PPT ,CD,CBL	LAQ,P-CASE,VV-Viva,CBA				
CO1, CO5	Demonstrate Dilatation & Curettage (D & C), Provisions of MTP act.Demonstrate cervical encirclage procedure (McDonald and Shirodkar procedure)	CAP	DK	KH	L_VC,CBL,D	VV-Viva, C-VC,CBA,S-LAQ	F&S	II	-	NLHP5.1
CO1	Elaborate *Nidana, Samprapti, Lakshana and Chikitsa of Garbha Vyapad - Upavishtaka Nagodara, Linagarbha, Makkala, Jarayu dosha.*	CC	MK	K	REC,L&PPT	S-LAQ,P-REC,VV-Viva	F&S	II	-	LH
CO1	Define Intra Uterine Growth Restriction (IUGR). Enumerate aetiological factors, classification, clinical diagnosis, investigations & management.	CC	MK	K	L&PPT ,CBL,CD,LRI	P-VIVA,SP ,S-LAQ	F&S	II	-	NLHT5.2
CO1	Identify and explain etiology, clinical diagnosis, investigations & management of Intra Uterine Growth Restriction, Oligohydramnios and Polyhydramnios.	CC	MK	K	CD,D-BED,CBL,L&PPT	CBA,VV-Viva,OSCE,P-VIVA	F&S	II	-	NLHP5.2
CO1	Describe Gestational Trophoblastic diseases and Rh incompatibility - pathophysiology and prevention.	CK	DK	K	L&PPT	VV-Viva	F&S	II	-	LH
CO1	Identify Ectopic pregnancy. Explain causes, clinical features, differential diagnosis & management.	CC	MK	K	CBL,DIS,L&PPT	VV-Viva,P-VIVA,OSCE,S-LAQ	F&S	II	-	NLHP5.3
CO1	Describe *Antarmruta Garbha – Nidana, Samprapti, Lakshana, Chikitsa*.	CK	MK	K	L&PPT ,REC	P-VIVA,S-LAQ,P-REC,T-OBT	F&S	II	-	LH
CO1, CO6	Describe Intrauterine fetal demise (IUFD) - Definition, causes, diagnosis, management & complications.	CK	MK	K	CBL,L&PPT , CD,DIS	P-VIVA,P-EXAM,SBA,S-LAQ,V	S	II	-	NLHT5.3

					,X-Ray	V-Viva				
CO1, CO6	Diagnose and plan management of Intrauterine fetal demise.	CAP	MK	KH	CBL,X-Ray,PBL,SIM	PP-Practical,P-VIVA,SBA,VV-Viva,CBA	F&S	II	-	NLHP5.4
CO1	Explain *Rakta Gulma* - differential diagnosis and management.	CK	NK	K	L&PPT	VV-Viva,INT	F	II	-	NLHT5.4

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 5.1	Abortion	**(1 hr)** Teacher will discuss classification of abortion with aetiological factors, clinical features, investigations with medical and surgical management. Present case scenarios of abortion - threatened, inevitable, complete, incomplete, missed, septic and habirtual abortion. Students will analyze the clinical features of given scenarios and discuss timely referral.
NLHT 5.2	Intra uterine growth restriction	**(1 hr)** Teacher will discuss aetiological factors, classification, clinical diagnosis, Investigations & Management of IUGR as per gestational age. Students will have peer discussion of simulated cases / clincal cases.
NLHT 5.3	Intra uterine fetal demise.	**(1 hr)** Faculty will discuss case scenario of fetal demise based on clinical features ,investigations and explain management strategies Students will analyse the clinical features, identify appropriate investigations, complications and discuss management

NLHT 5.4	*Rakta Gulma*	**(1hr)** Teacher will discuss *Rakta Gulma* in terms of D*osha,Dushya* and clinical manifestations Students will differentiate conditions involving clinical features and underlying concept.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 5.1	*Garbhashaya Mukha Vistrutikarana evam Garbhasaya Lekhana* - Dilatation and Curettage *Garbhashaya Greeva Samvrutikarana* - Cervical Encirclage	**(3hrs)** Teacher will explain Indications of Dilatation and Curettage (diagnostic/therapeutic), complications and it's management with video demonstration. a. Dilatation and Curettage in Abortion. Prerequisites – Provisions of MTP act. Steps – 1. History of presenting complaint - Details such as onset, duration and amount of bleeding, whether mild, moderate or severe. 2. Examination i. General examination: Assessment of general condition ii. Systemic examination: CVS, RS, NS & Breast examination. iii. Per abdomen examination

		iv. Per speculum examination and vaginal examination 3. Investigations: Guided by clinical history & examination 4. Differential diagnosis i. Intra uterine pregnancy ii. Abortion iii. Ectopic pregnancy iv. Molar pregnancy Case discussion - Clinical Case scenarios Observation of procedure – Pre-requisites- consent, pre-operative preparations, operation, post operation. b. Cervical Encirclage Enlist Indications and observe methods of cervical encirclage in pregnancy. Demonstration of the Mc Donald and Shirodkar procedure through a video or on a mannikin. Students will observe the procedure and analyze the type of abortion and discuss management.

NLHP 5.2	Intra Uterine Growth Restriction, Oligohydramnios and Polyhydramnios	**(2 hrs)** Teacher will demonstrate clinical examination and diagnosis of following conditions. a. Intra Uterine Growth Restriction 1. Clinical examination - Per abdomen Essential points in Diagnosis Serial measurements of Symphysis Fundal Height (SFH) or Biometry Case demonstrations for normal growth vs restricted growth of fetus, assessment of amniotic fluid and management based on the gestational age. 2. Ultrasonography – Amniotic Fluid Index / Fetal biomertry / Expected Fetal Weight 3. Discussion - Enumeration of various causes of Growth restrictions like, Maternal, Fetal & Placental. b. Oligohydramnios and Polyhydramnios Case / scenario-based discussion with explaination of aetiology, clinical diagnosis, investigations & management. Students will be engaged interpreting clinical examination, ultrasound findings and differential diagnosis with selection of approriate treatment.

NLHP 5.3	Ectopic pregnancy	**(1 hr)** Teacher will present a case scenario of undiagnosed ectopic pregnancy (presenting with acute abdominal pain and bleeding p/v). Discussion on differential diagnosis, interpreting ultrasound findings, and selecting the appropriate treatment (medical vs. surgical).
NLHP 5.4	Intrauterine Fetal Demise (IUFD)	**(1 hr)** Teacher will present a case scenario of third trimester of pregnancy with absent fetal movements and discuss approach to the case as below Clinical findings Role of USG X-ray findings Investigations, management protocols and complications Counselling techniques Students will have peer discussion on clinical examination and plan management

Topic 6 Garbhini Vyapad - Minor Ailments and Major Disorders of Pregnancy (LH :6 NLHT: 0 NLHP: 6)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO3, CO6	Describe *Nidana, Lakshana, Chikitsa of Garbhini Vyapad - Aruchi, Hrillasa,Chardhi, Vibandha.*	CC	MK	K	L&PPT	S-LAQ,VV-Viva	F&S	II	-	LH
CO1, CO3, CO6	Describe Nidana, Lakshana, Chikitsa of Garbhini Vyapad - Atisara, Arsha, Parikartika, Udavarta, Vaivarnya, Kandu, Kikkisa.	CC	MK	K	DIS,L&PPT ,CBL	S-LAQ,VV-Viva	F&S	II	-	LH
CO1, CO3, CO6	Diagnose *Garbhini Pandu* - Anaemia in pregnancy, describe investigations and plan of management.	CAN	MK	KH	CBL,IBL,LRI,DA,CD	P-VIVA,P-CASE,RK	F&S	II	-	NLHP6.1

CO1, CO3, CO6	Diagnose *Garbhini Jwara* (fever in pregnancy) - clinical features, investigations and management protocol	CAN	MK	KH	DA,CD, CBL,LR I	VV-Viva,S-LAQ,P-CA SE,P-VIVA ,P-EXAM	F&S	II	-	NLHP6.2
CO1, CO3, CO6	Define Pregnancy-Induced Hypertension, Pre-Eclampsia and Eclampsia.Describe causative factors, clinical features, and management.	CC	MK	K	L&PPT	VV-Viva,S-LAQ	F&S	II	-	LH
CO1, CO3, CO6	Diagnose Pregnancy induced hypertension, pre-eclampsia and eclampsia with clinical features, examination and investigations.	CAN	MK	SH	TBL,RP ,CD,D-BED,L RI	S-LAQ,VV -Viva,SP,P M,P-EXAM	F&S	II	-	NLHP6.3
CO1, CO3, CO5	Describe Gestational diabetes, Thyroid dysfunction and HIV - in pregnancy	CK	DK	K	CBL,LR I,CD,L &PPT	VV-Viva	F	II	H-KC	LH
CO1, CO3, CO6	Describe *Bahu-Apatya* (Multiple pregnancy) - Causes, clinical findings, diagnosis and plan of management.	CK	DK	K	CBL,L &PPT	VV-Viva	F	II	-	LH
CO1, CO3, CO6	Diagnose *Yamala-garbha* (Twin Pregnancy) and describe varieties, etiology, lie, presentation, complications and management.	CAN	DK	K	D-BED, LRI,CD ,D-M,CBL	VV-Viva,P-EXAM,CB A,P-VIVA,SBA	F&S	II	-	NLHP6.4
CO1, CO3, CO5	Define Antepartum Hemorrhage (APH) and enumerate causes, classification, clinical features and management guidelines.	CC	MK	K	L&PPT ,CD,CB L	CBA,VV-V iva,SBA,S-LAQ	F&S	II	-	LH
CO1, CO3, CO5	Diagnose Antepartum hemorrhage - Placenta previa with clinical features and confirmation by ultrasound. Plan management with timely referral.	CS	MK	KH	D-BED, LRI,CD ,PBL,L	VV-Viva,P-ID,P-VIVA	F&S	II	-	NLHP6.5

					&PPT					
CO1, CO3, CO5	Diagnose Antepartum hemorrhage - Abruptio placenta, clinical features, and confirmation by ultrasound. Plan management with knowledge of the need for referral.	CS	MK	KH	PBL,D-M,CBL,D,L&PPT	P-EXAM,P-VIVA,COM,S-LAQ	F&S	II	-	NLHP6.6

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 6.1	*Garbhini Pandu* - Anaemia in pregnancy.	**(1hr)** Faculty will present a case of Anaemia in pregnancy and explain 1. Symptoms exploration - Pallor, fatigability, breathlessness on exertion, giddiness, anorexia, tingling sensation in extremities 2. Analysis of history - Obstetric history (Mupltiparity), Menstrual History(Abnormal Uterine Bleeding) , Contraceptive history & Dietary history, bleeding piles etc 3. Examination - A) General Examination - Record vitals B) Systemic Examination - CVS , Respiratory & Nervous system examination C) Obstetric examination (e.g. -Twins & multiple pregnancy) D) Investigations – to assess severity of Anaemia as mild ,moderate or severe

		4. Plan Management as per the gestation ,severity & type of Anaemia Students will discuss the effects of Anaemia, clinical outcome and plan management as per severity and gestational age .
NLHP 6.2	*Garbhini Jwara* - fever in pregnancy.	**(1 hr)** Teacher will present a case /scenario of Fever in pregnancy and explain 1. Symptoms exploration - temperature, fatigability, giddiness, anorexia, dryness of mouth 2. Examination - A) General Examination - Record vitals with temperature. B) Systemic Examination – CVS , Respiratory & Nervous system examination C) Obstetric examination (to assure fetal wellbeing) D) Investigations – to assess the cause/aetiology of fever 4. Plan Management as per the cause and severity. Student will have peer discussion and record the case in prescribed journal proforma
NLHP 6.3	Hypertensive disorders in Pregnancy	**(1 hr)** Teacher will demonstrate clinical features in pregnancy induced hypertension and pre-eclampsia.Plan investigations, management, anticipate complications and explain timely referral. Demonstrate approach to a pregnant or puerperal woman presenting with convulsions. Demonstration of Eclampsia drill. Students will analyse the diagnosis,plan primary care,document the case and importance of timely referral to higher centre for advance care.
NLHP 6.4	*Yamala-garbha* - Twin Pregnancy (1 hr)	**(1 hr)** Teacher will demonstrate clinical diagnostic features,varieties,lie, presentation on manikin/ video/ clinical case . Discuss and Interpret investigation ,understand possible care,complications and plan management in

		pregnancy and labour Student will imitate examination of Twin pregnancy on manikin and have peer discussion on Antenatal care
NLHP 6.5	Antepartum Hemorrhage -Placenta previa	**(1 hr)** Teacher will enable students to - 1. Diagnose Antepartum hemorrhage - Placenta previa based on clinical features and confirmation by ultrasound. 2. Identify the degree of placenta previa. 3. Plan management, know the limitations 4. Analyze need for referral to higher centre Teacher will analyse the diagnostic skill and preparedness of student
NLHP 6.6	Antepartum Hemorrhage - Abruptio placenta	**(1hr)** Teacher will enable students to - 1. Diagnose Antepartum hemorrhage - Abruptio placenta based on clinical features and confirmation by ultrasound. 2. Identify the type of Abruptio placenta 3. Plan management, know the limitations

		4. Analyze need for referral to higher centre Teacher will analyse the diagnostic skill and preparedness of student

Topic 7 Prasava Vigyana - Labour (LH :10 NLHT: 1 NLHP: 17)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO4	Describe *Sutikagara nirmana and sangrahaneeya dravya*.	CK	MK	K	L&PPT	S-LAQ,VV-Viva	F&S	II	-	LH
CO3, CO4	Explain chemical composition, indication, contraindication, mode of action, dosage, shelf life, and complications of drugs commonly used during labour. Explain guidelines for use with pharmacotherapeutics.	CK	MK	K	DA,BL, L&PPT	VV-Viva	F	II	-	NLHT7.1
CO4, CO5	Visualize and Demonstrate Labour room set-up and labour room protocol according to National health Guidelines.	PSY-SET	MK	KH	DIS,D,FV,TPW, TBL	PA,VV-Viva	F&S	II	-	NLHP7.1
CO4, CO5	Define *Prasava*, explain *Prasavahetu* and *Prasava kala*.	CK	MK	K	L&PPT	VV-Viva,S-LAQ	F&S	II	-	LH
CO4, CO5	Describe causes of onset of Labour & narrate Physiology of Labour.	CC	MK	K	L&PPT	VV-Viva,S-LAQ	F&S	II	-	LH
CO4, CO5	Diagnose Labour - Identify true and false labour pain.	PSY-GUD	MK	SH	SIM,D-M,CBL, CD	CBA,VV-Viva,SBA,Mini-CEX	F&S	II	-	NLHP7.2
CO4, CO5	Describe anatomy of fetal skull with diameters, fontanelle, and importance in labour.	CC	MK	K	L&PPT	S-LAQ,VV-Viva	F&S	II	-	LH

CO4	Demonstrate anatomy of fetal skull with diameters, fontanelle, and their obstetric importance.	PSY-GUD	MK	SH	D,D-M	P-MOD,VV-Viva	F&S	II	-	NLHP7.3
CO4, CO5	Define and explain the *Avasthas - Prajayini, Upastitha Prasava, Asanna Prasava.*	CC	MK	K	REC,L &PPT	P-REC,VV-Viva,S-LAQ,PP-Practical	F&S	II	-	LH
CO4	Assess adequacy of pelvis.	CE	MK	SH	D-M,X-Ray,D,SIM	OSCE,VV-Viva,P-PRF,SBA	F&S	II	-	NLHP7.4
CO4	Define Avi Shoola and Grahi Shoola. Explain Prasuti Maruta and Garbhastithi Parivartana during Prasavakala.	CC	MK	K	L&PPT	VV-Viva,S-LAQ	F&S	II	-	LH
CO4	Describe Stages of Labour.	CC	MK	K	L&PPT	S-LAQ,VV-Viva,COM	F&S	II	-	LH
CO4, CO5	Demonstrate events in each stage of labour.	PSY-GUD	MK	KH	D,D-BED,SIM, CBL,FV	RK,VV-Viva,CBA,P-VIVA,SP	F&S	II	-	NLHP7.5
CO4	Explain the Mechanism of labour.	CC	MK	K	L&PPT	S-LAQ,VV-Viva	F&S	II	-	LH
CO4	Demonstrate Mechanism of Labour	PSY-GUD	MK	SH	D,SIM, D-M	DOAP,VV-Viva,P-VIVA,P-MOD, S-LAQ	F&S	II	-	NLHP7.6
CO4	Describe Prasava Paricharya. Explain monitoring and	CC	MK	K	L&PPT	VV-Viva,S-LAQ,P-VIVA	F&S	II	-	LH

	management of all stages of labour.									
CO4	Explain the Importance of Partograph.	CC	MK	K	D,L&PPT	VV-Viva,CBA	F&S	II	-	LH
CO4	Monitor labour	CAN	MK	KH	CBL,D,FV,PT,SIM	P-PRF,P-VIVA,VV-Viva,SP	F&S	II	-	NLHP7.7
CO4	Monitor progress and manage stages of labour.	CAN	MK	KH	SIM,CD,D-BED,CBL,PT	VV-Viva,Log book,P-VIVA,OSCE,CBA	F&S	II	-	NLHP7.8
CO3, CO4	Plot Partograph.	PSY-GUD	MK	SH	D,SIM,PT,D-M	S-LAQ,DOPS,P-PRF,RK,DOAP	F&S	II	-	NLHP7.9
CO3, CO4	Demonstrate and practice Episiotomy on model and simulation.	PSY-SET	MK	SH	FV,D,D-M,L_VC,CBL	VV-Viva,P-PRF	F&S	II	-	NLHP7.10
CO4	Demonstrate applications of Intrapartum fetal monitoring techniques.	PSY-GUD	MK	SH	CBL,L_VC,D-M,FV,D	Log book,P-VIVA,VV-Viva	F&S	II	H-KB	NLHP7.11
CO4, CO5	Perform *Jatamatra Paricharya*	PSY-GUD	MK	KH	D-BED,CBL,PT,PBL,L_VC	PP-Practical,VV-Viva,P-CASE,P-VIVA	F&S	II	H-KB	NLHP7.12

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity

NLHT 7.1	Essential drugs for labour practice; as per National protocol.	**(1 hr)** Teacher will explain chemical composition, indication, contraindication, mode of action, dosage, shelf life, route of administration, and complications of drugs commonly used during labour- a) uterotonics b) analgesics c) ergot alkaloids e) anaesthetics. Explain guidelines for use with pharmacotherapeutics. Student will discuss and analyze the drugs commonly used during labour.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 7.1	Labour Room Setup	**(1hr)** Teacher will make students familiarize with standards of Labour room set up and gain competency in labour room practice protocol according to National Health Guidelines. Student will get acquainted with the labour room set up and demonstrate functionality with respect to labour room practice protocols according to National Health Guidelines.
NLHP 7.2	Diagnosis of Labour	**(1hr)** Teacher will equip students to develop clinical diagnostic skills in identifying true labour pains through case presentation and demonstration on model, simulator, clinical examination. Students will observe and imitate examination on model and explain the signs of true labour pains.
NLHP 7.3	Fetal skull and labour	**(1 hr)** Teacher will demonstrate anatomy of fetal skull with diameters and fontanelles, assessment of presenting part with discussion on obstetric importance. Students will imitate demonstration of fetal skull on models and discuss its outcome on labour.

NLHP 7.4	Adequacy of pelvis	**(1 hr)** Teacher will demonstrate different scenarios regarding pelvic diameters and engaging diameter of fetal skull. Clinical adequacy features of maternal pelvis through clinical pelvimetry and assess the presenting part. Student will observe and imitate skills of pelvic assessment on model.
NLHP 7.5	Stages of Labour	**(3 hrs)** Teacher will equip students to develop clinical skill to identify stages of labour with discussion on duration and events of labour. Teacher will use video demonstration of stages of labour/ simulator/case based demonstration of labour process. First stage: Assessment of cervical dilatation and effacement Second stage: Status of membranes, descent of fetus, station of head, expulsion of fetus Third stage: Signs of placental separation, expulsion of placenta, placenta and cord examination. Students will observe and discuss events of each stage of labour alongwith duration and record in prescribed journal proforma.
NLHP 7.6	Mechanism of Labour	**(2hrs)** Teacher will demonstrate events in Mechanism of labour on model and simulator - Engagement, Descent, Flexion, Internal rotation, Crowning, Extension, Restitution, External rotation, Expulsion. Students will practice, demonstrate on model / simulator and explain each event in mechanism of labour.
NLHP 7.7	Labour monitoring	**(1 hr)** Teacher will demonstrate the factors of assessment A) Interval, intensity and duration of uterine contractions B) Cervical changes- dilatation, effacement, position, consistency.

		C) Station of presenting part D) Status of membranes & Liquor Student will observe and document progress of labor in prescribed case proforma. Students will obseve and document in prescribed journal proforma.
NLHP 7.8	Management of stages of labour	**(1 hr)** Teacher will enable students to develop skill of management of labour. Steps of management of each stage beginning from observation, counseling, preparedness and implement action / intervention as needed. Students will demonstrate skills to identify the active stage and progress of labour with the steps of management. Record the findings in prescribed journal format.
NLHP 7.9	Plot partograph	**(2 hrs)** Teacher will enable students to monitor labour progress and plot partograph for proper management and timely intervention. Students will discuss the components of partogrpah - alert line, action line and other aspects and practice to plot. Teacher will evaluate and provide feedback.
NLHP 7.10	Episiotomy	**(2 hrs)** Teacher will demonstrate Episiotomy on manikin and discuss types -Medial ,Lateral, Mediolateral & J-shaped with administration of local anaesthesia. Explain the merits and demerits of different types of incision. Demonstrate repair in layers with suturing techniques. Student will practice episiotomy on manikin and imitate repair Discuss possible complications, post repair assessment and plan perineal care.

NLHP 7.11	Intrapartum fetal monitoring techniques	**(1 hr)** Teacher will demonstrate with video / clinical case and interpret the result of Intrapartum fetal monitoring. Student will discuss and analyse different techniques and its clinical importance.
NLHP 7.12	*Jatamatra Paricharya*	**(1hr)** Teacher will demonstrate immediate newborn care on model / case Student will practice newborn resuscitation on model.

Topic 8 Prasava Vyapad - Labour Complications & Obstetric Emergencies. (LH :6 NLHT: 2 NLHP: 4)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO4	Elaborate - *Paribhasa, Nidana, Samprapti, Lakshana and Chikitsa of Akala Prasava* (Preterm labour).	CC	MK	K	L&PPT	COM,VV-Viva,S-LAQ	F&S	III	-	LH
CO4	Analyze management of preterm labour through observation.	CAN	MK	KH	PBL,CD,CBL,D-BED	COM,S-LAQ,CBA,VV-Viva,SBA	F&S	III	-	NLHP8.1
CO4	Explain Pre-labour rupture of membranes (PROM)	CC	MK	KH	PBL,CBL,L&PPT ,CD	VV-Viva,COM,S-LAQ	F&S	III	-	LH
CO4	Elaborate - *Paribhasa, Nidana, Samprapti, Lakshana and Chikitsa of Vilambita Prasava* (Prolonged labour)	CC	MK	KH	L&PPT	VV-Viva,COM,S-LAQ	F&S	III	-	LH
CO4	Analyze causes and plan management in *Vilambita prasava* (Prolonged labour)	CAP	MK	K	L&PPT,CD,PBL,CBL	S-LAQ,VV-Viva,CBA	F&S	III	-	NLHT8.1

CO4	Elaborate *Kalateeta Prasava* and Postmaturity.	CC	MK	K	L&PPT ,CBL,P BL,CD	COM,S-LA Q,VV-Viva ,P-VIVA	F&S	III	-	NLHT8.2
CO4	Define Postpartum Hemorrhage.Describe classification and explain causes and clinical features.	CC	MK	K	L&PPT ,CBL	COM,S-LA Q,VV-Viva	F&S	III	-	LH
CO4	Describe complications and steps of management of postpartum haemorrhage.	CC	MK	K	L&PPT	VV-Viva,C OM,SBA,S -LAQ,P-VIVA	F&S	III	-	LH
CO4	Elaborate *Paribhasa, Nidana, samprapti, lakshana* and *chikitsa of Aparasanga* (Retained placenta)	CC	MK	K	L&PPT	S-LAQ,CB A,VV-Viva,COM	F&S	III	-	LH
CO4	Demonstrate causes and clinical features of Postpartum Hemorrhage (PPH).	CAP	MK	KH	CBL,L &PPT , SIM,DI S,PBL	P-VIVA,PP -Practical,V V-Viva,S-LAQ,CBA	F&S	III	-	NLHP8.2
CO4	Demonstrate management of Retained placenta.	PSY-SET	MK	SH	CBL,C D,D-M	P-MOD,SB A,CBA,S-L AQ,VV-Viva	F&S	III	-	NLHP8.3
CO4	Practice steps of management under guidance, in Postpartum Hemorrhage (PPH).	PSY-GUD	MK	SH	D-M,C BL,SIM ,D,TBL	PP-Practica l,TR,COM, VV-Viva,Log book	F&S	III	-	NLHP8.4

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity

NLHT 8.1	Prolonged Labour	**(1 hr)** Teacher will demonstrate - 1. Diagnosis of Prolonged Labour 2. Analysis of cause 3. Assessment of fetal wellbeing 4. Anticipate complications 5. Plan management. Student will discuss diagnosis, possible complications and plan of management
NLHT 8.2	Postmaturity	**(1 hr)** Teacher will demonstrate - 1. Diagnosis of Post maturity 2. Plan investigations 3. Assessment of fetal wellbeing 4. Anticipate complications 5. Plan management

		Student will discuss diagnosis, assessment methods, possible complications and plan of management.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 8.1	Preterm labour	**(1hr)** Teacher will discuss the methods of determining gestational age ,assess established labor and propose plan of management Students will observe and document.
NLHP 8.2	Postpartum Hemorrhage	**(1hrs)** Teacher will demonstrate - 1. Diagnosis of Postpartum hemorrhage. 2. Analyze underling cause 3. Assess the condition of patient and explain need of resuscitation. Student will discuss causes of postpartum hemorrhage - Tone, Trauma, Tissue, Thrombin. Peer discussion on clinical findings to know the cause.
NLHP 8.3	Retained placenta	**(1hr)** Teacher will demonstrate the signs of retained placenta and steps of management Student will observe, analyze the underlying cause and document
NLHP 8.4	Postpartum hemorrhage management.	**(1hr)** Teacher will -

		1. Demonstrate techniques for manual removal of the placenta and management of postpartum hemorrhage using simulation models. 2. Manage birth canal injuries. 3. Identification of Atonic uterus and demonstrate bimanual compression. 4. Demonstrate PPH (Postpartum Hemorrhage) drill. Students will participate in the drill and demonstrate management techniques.

Topic 9 Moodhagarbha - Obstructed Labour (LH :8 NLHT: 3 NLHP: 6)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO4	Explain- *Nirukti, Paribhasa, Nidana, Samprapti, Lakshana* of *Moodhagarbha*.	CC	DK	K	L&PPT	COM,VV-Viva,S-LAQ,P-REC	F&S	III	-	LH
CO4	Elaborate *Bheda, Gati* and *Chikitsa* of *Moodhagarbha.*	CC	MK	K	L&PPT ,D-M	VV-Viva,COM,S-LAQ ,P-REC	F&S	III	-	LH
CO4	Demonstrate *Bheda and Gati* of *Moodhagarbha* .	CAP	MK	KH	D-M,L &PPT ,PrBL,D	VV-Viva,PRN,S-LAQ, P-MOD	F&S	III	-	NLHT9.1
CO4	Enumerate different types of abnormal presentations.	CK	DK	K	L&PPT	VV-Viva	F	III	-	LH
CO4	Demonstrate Assisted Breech delivery techinques.	PSY-SET	DK	KH	SIM,D-M,L_VC	P-MOD,VV-Viva	F	III	-	NLHP9.1

CO4	Describe Cephalopelvic disproportion (CPD)	CC	MK	K	L&PPT	VV-Viva,S-LAQ	F&S	III	-	LH
CO4	Diagnose Cephalopelvic disproportion (CPD).	CAN	MK	KH	SIM,D-M	VV-Viva,P-MOD	F	III	-	NLHP9.2
CO4	Describe U*padrava* of *Moodha garbha. - Garbhakosha Parasanga, Makkala* and *Yonisamvarana.*	CK	MK	K	L&PPT	S-LAQ,VV-Viva,P-REC	F	III	-	LH
CO4	Demonstrate *Upadrava* of *Moodha garbha - Garbhakosha Parasanga, Makkala* and *Yonisamvarana*	CAP	MK	KH	CBL,L&GD	VV-Viva	F	III	-	NLHP9.3
CO4	Describe obstetric emergencies with causes, clinical features and complications - cord prolapse, uterine inversion, amniotic fluid embolism, obstetric shock and uterine rupture.	CC	DK	K	L&PPT,CBL	VV-Viva	F	III	-	LH
CO4	Discuss causes, clinical features and findings of investigation in obstetric emergencies.	CC	DK	K	PSM,L_VC,SIM,D	INT,P-ID,VV-Viva	F	III	-	NLHT9.2
CO4	Describe Bishop's Score.Explain methods of induction and augmentation of labour.	CC	DK	K	L&PPT	S-LAQ,VV-Viva	F&S	III	-	LH
CO1, CO3, CO4	Explain -a. Indications, contraindications, procedure and complications of ventouse delivery.b. Indications, contraindications, procedure and complications of forceps delivery.c. Indications, types and procedure of caesarean section.	CC	MK	K	L&PPT,FV	COM,VV-Viva,S-LAQ	F&S	III	-	LH
CO1, CO3, CO4	Calculate and Interpret Bishop’s score.Demonstrate forceps application, vacuum extraction and Caesarean Section.Explain indications and complications for each mode of assistance.	CAP	DK	KH	D-M,L_VC,D	P-MOD,VV-Viva,COM	S	III	-	NLHP9.4
CO1, CO4	Demonstrate abnormal presentations - face, brow, shoulder	CAP	MK	KH	D-M,L&PPT	SBA,P-EXAM,VV-	S	III	-	NLHT9.3

						Viva					

Non Lecture Hour Theory		
S.No	**Name of Activity**	**Description of Theory Activity**
NLHT 9.1	*Moodhagarbha - Bheda and Gati*.	**(1 hr)** Teacher will demonstrate *Bheda* and *Gati* of *Moodhagarbha* on model/manikin/3D. Students will compile and present *Moodhagarbha* with peer discussion.
NLHT 9.2	Obstetric Emergencies	**(1 hr)** Teacher will demonstrate identification of obstetric emergency through examination and investigations. Plan mock Drill for timely referral to higher centers. Students will observe and participate.
NLHT 9.3	Abnormal presentations – face, brow, shoulder presentations	**(1 hr)** Teacher will demonstrate abnormal presentations – face, brow, shoulder presentations on model/manikin/3D video/case. Student will practice abnormal presentations on model and discuss its outcome on labour.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 9.1	Assisted Breech delivery.	**(2 hrs)** Teacher will demonstrate on manikin / model / with 3D video. 1. Clinical diagnosis of type of breech

		2. Determining positions (L.S.A/R.S.A/R.S.P/L.S.P.) 3. Preparedness 4. Steps of assisted breech delivery Student will observe and analyze steps of breech delivery.
NLHP 9.2	Assesment of Cephalo-Pelvic Disproportion	**(1 hr)** Teacher will demonstrate and guide student to assess cephalo pelvic disproportion by clinical assessment. Student will observe, discuss and emulate clinical examination to diagnose CPD.
NLHP 9.3	Complications of *Moodha Garbha*	**(1 hr)** Teacher will discuss the complications of obstructed labour and demonstrate outcomes-cervical dystocia and uterine rupture. Students will analyze the complications and discuss preventive strategies.
NLHP 9.4	1. Bishop’s score and Induction/ Augmentation of Labour 2. Assisted labour techniques	**(2 hrs)** 1. Teacher will demonstrate components of Bishop's score on model / clincial case and interpret the score favourable for induction of labour and decide the method of induction. Student will observe and document the components of Bishop's score. 2. Teacher will demonstrate assisted labour techniques namely forceps application, vaccum extraction, caesarean section through video /manikin / case. Students will observe and record in prescribed journal proforma.
Topic 10 Sootika Vigyana - Puerperium (LH :3 NLHT: 1 NLHP: 3)		

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO4	Define *Sootika* and explain *Sootika Kala* with *Paricharya.*Describe puerperial changes and explain post-partum care.	CC	MK	K	L&PPT ,REC	P-REC,S-LAQ,COM, VV-Viva	F&S	III	-	LH
CO4	Demonstrate clinical examination of a puerperal woman - abdominal, perineal, and breast.	PSY-GUD	MK	SH	CBL,D, D-BED, SIM,D-M	P-VIVA,P-CASE,VV-Viva	F&S	III	-	NLHP10.1
CO4	Describe *Nidana, Samprapti, Lakshana, Bheda* and *Chikitsa* of *Sootika Vyapad.*	CC	MK	K	PBL,CBL,L&PPT	S-LAQ,COM,VV-Viva	F&S	III	-	LH
CO4	Explain causes, clinical features, management and complications of puerperal diseases.	CC	MK	K	DIS,CBL,CD,PBL,L&PPT	COM,S-LAQ,VV-Viva	F&S	III	-	NLHT10.1
CO4	Present case study on *Sootika Vyadhi*.	PSY-GUD	MK	SH	D-BED, SIM,CD ,PER,PBL	VV-Viva,CL-PR,P-CASE,P-VIVA	F&S	III	-	NLHP10.2
CO4, CO5, CO6	Explain contraception and family planning methods.	CK	MK	K	L&PPT ,DIS	S-LAQ,VV-Viva,COM	F&S	III	-	LH
CO4, CO5	Justify selection of contraceptives with method and time of administration.	CE	MK	KH	DIS,TUT,D,D-M,SIM	VV-Viva,P-PRF,OSCE, PP-Practical	F&S	III	-	NLHP10.3

Non Lecture Hour Theory		
S.No	**Name of Activity**	**Description of Theory Activity**
NLHT 10.1	Puerperal diseases.	**(1 hr)** Teacher will describe and explain puerperal diseases and discuss plan of management. Student will analyze the causes of puerperal diseases and discuss preventive stragegies by implementation of *sootika paricharya.*
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 10.1	Examination of a puerperal woman - abdominal, perineal, and breast.	**(1 hr)** Teacher will - 1. Demonstrate breast examination 2. Demonstration of consistency and involution of uterus with other pelvic structures. 3. Demonstrate perineal examination 4. Explain characteristics of normal lochia. Student will observe and practice abdominal examination on model / manikin. Student will record in prescribed journal proforma.
NLHP 10.2	*Sootika Vyadhi*	**(1 hr)** Students will be divided into groups. They will record cases of *Sootika vyadhi* under guidance of teacher and present with peer discussion. Teacher will assess the skill of history taking, examination and provide feedback.
NLHP 10.3	Contraception	**(1 hr)**

		Teacher will discuss contraceptive methods. a. Temporary: Physical method/Oral contraceptives/Intra uterine contraceptive devices/ Emergency contraception. b. * Permanent methods. (* Details in Paper-II) 1. Select ideal method of contraception 2. Prerequisites for administration of contraceptives 3. Demonstrate the method of use / administration Student will be given case scenarios to select appropriate contraceptive method with time of administration.

Topic 11 Stanya Vigyana - Lactation (LH :2 NLHT: 2 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO4	Explain *Stanya Utpatti* and describe *Stanya Sampat Lakshana.*Describe physiology of lactation and components of breast milk.	CC	MK	K	L&PPT	VV-Viva,S-LAQ	F&S	III	-	LH
CO4	Analyze Breast milk components and Learn breastfeeding techniques.	CAN	MK	KH	SIM,L&PPT	VV-Viva,S-LAQ	F&S	III	H-KB	NLHT11.1
CO4	Demonstrate breast feeding techniques.	PSY-GUD	MK	SH	RP,D-BED,CBL	VV-Viva	F	III	-	NLHP11.1
CO4	Describe *Nidana, Samprapti, Lakshana* of *Stanya*	CC	MK	K	L&PPT	VV-Viva,S-	F&S	III	-	LH

	Dushti and *Stana Vidradhi*.					LAQ				
CO4	Explain causes,clinical features,investigations and management of mastitis and breast abscess.	CC	MK	K	D,CD,DA,CBL,PBL	VV-Viva, C-VC,S-LAQ,P-CASE	F&S	III	H-SH	NLHT11.2
CO4	Diagnose Breast Engorgement, Mastitis, Breast abscess.	CAP	MK	KH	D,CBL,CD,PBL,D-BED	S-LAQ,P-CASE,P-VIVA,P-ID,VV-Viva	F&S	III	H-SH	NLHP11.2

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 11.1	Breast milk and feeding techniques.	**(1hr)** Teacher will discuss breast milk components with its importance and demonstrate breast feeding techniques. Student will observe and review the breast milk substitutes from literature and discuss the importance of breast feeding for maternal and child health.
NLHT 11.2	Mastitis and Breast Abscess.	**(1 hr)** Teacher will explain causes, clinical features and examination of breast for diagnosis of mastitis and breast abscess with plan of management. Student will observe and learn medical and surgical management of breast abscess.

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 11.1	Techniques of Breastfeeding.	**(1 hr)** Students will be divided into groups and will emulate breast feeding technqiues in different postures. Teacher will assess the techniques and provide feedback.

NLHP 11.2	Breast Engorgement, Mastitis, Breast abscess	**(1hr)** Teacher will demonstrate Breast Engorgement, Mastitis, Breast abscess. with Video / Clinical case and explain plan of management Student will observe and identify the clinical features and discuss medical and surgical management

Paper 2 (STREE ROGA - GYNAECOLOGY)										
A3 Course out come	**B3 Learning Objective (At the end of the session, the students should be able to)**	**C3 Domain/sub**	**D3 MK / DK / NK**	**E3 Level**	**F3 T-L method**	**G3 Assessment**	**H3 Assessment Type**	**I3 Term**	**K3 Integration**	**L3 Type**
Topic 12 Stree Prajanananga Nirmana and Vikruti - Development of Female Reproductive System with Anomalies. (LH :3 NLHT: 2 NLHP: 4)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO2	Explain the development of the Female Reproductive system from the Mullerian duct - Stree Jananaga Vikara (Muillerian duct anomalies)	CC	MK	K	L&PPT	COM,S-LAQ,VV-Viva	F&S	I	-	LH
CO1, CO2	Demonstrate the anatomy of female reproductive system.	CAP	MK	KH	D-M,L_VC	S-LAQ,M-CHT,VV-Viva,P-ID,P-VIVA	F&S	I	-	NLHP12.1
CO1, CO2	Demonstrate the anomalies of Female Reproductive system.	CAP	MK	KH	D-BED, PBL,L&	P-VIVA,VV-Viva,P-I	F&S	I	-	NLHP12.2

					PPT ,CBL,D-M	D,S-LAQ,QZ				
CO1, CO2	Explain Neuendorocrinology in Puberty & Menopause	CC	MK	K	L&PPT	S-LAQ,VV-Viva	F&S	I	-	LH
CO1, CO2	Explain Anatomical and Physiological aspects of Puberty and Menopause.	CC	MK	K	L&PPT	S-LAQ,VV-Viva,COM	F&S	I	-	LH
CO2	Explain neuroendocrinology with respect to puberty - hormones and functions.	CC	MK	K	PER,DIS	VV-Viva,S-LAQ,CL-PR	F&S	I	-	NLHT12.1
CO2	Explain applied aspects of Puberty and Adolescence.	CAP	MK	K	DIS,PER	CL-PR,S-LAQ,VV-Viva	F&S	I	-	NLHT12.2
CO2	Demonstrate Pubertal changes –Thelarche, Pubarche and Menarche	CAP	MK	KH	PER,CBL,D	QZ ,VV-Viva	F&S	I	-	NLHP12.3
CO2	Identify normal and abnormal Pubertal changes.	CAN	MK	KH	D-M,CD,DIS	QZ ,VV-Viva	F&S	I	-	NLHP12.4

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 12.1	Neuroendocrinology with respect to Puberty	**(1hr)** Students will have class presentation,discussion and concluding remarks by teacher.
NLHT 12.2	Applied aspects - Puberty and Adolescence	**(1hr)** Students will have Class presentation ,Group discussion on healthy transition through Puberty and Adolescence followed by concluding remarks by the teacher.

Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 12.1	Development of Female reproductive system	**(1hr)** Teacher will demonstrate development Female reproductive system from Mullerian Duct system on model / with video Student will discuss and analyse the possible defects.
NLHP 12.2	Anomalies of Female reproductive system	**(1 hr)** Teacher will demonstrate the Structural anomalies of Female reproductive system on model / video/ case instances Student will observe and analyze the underlying cause.
NLHP 12.3	Puberty	**(1hr)** Teacher will demonstrate changes in Puberty on Model / Charts / Case Students will discuss Pubertal changes -Thelarche- Tanner's staging , Pubarche & Menarche.
NLHP 12.4	Identify normal and abnormal Pubertal changes.	**(1hr)** Teacher will demonstrate Normal changes and discuss Abnormal conditions on Video / Chart / Case. Students will analyze outcomes of abnormal Puberty.

Topic 13 Yantra evam Shastra - Instruments (LH :1 NLHT: 1 NLHP: 6)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO3	Elaborate instruments commonly used in procedures and surgeries in Stree Roga (Gynaecology) and Prasuti tantra (Obstetrics). Describe the type of Yantra (Blunt instruments) and its utilization. 1. Sandansha Yantra- (Pincer-like	CC	MK	K	L&PPT ,D	P-EXAM,D OPS,P-ID, VV-Viva,DOPS	F&S	I	-	LH

	or dissecting forceps) Annigraha - plain/ non-toothed forceps, Sannigraha - Toothed forceps.2. Swastika Yantra (Cruciform like forceps) - Allies forceps, Vulsellum, Sponge holding forceps, Artery forceps, Babcock,s forceps, Cheatle's forceps, Kocher's forceps, Needle holder, Artery forceps, Ovum forceps, Green armytage forceps, Cervical punch biopsy forceps. 3. Shalaka Yantra- (Rod like instruments) - Uterine sound, Hegar's dilator, Uterine curette, endometrial biopsy curette, Anterior vaginal wall retractor, Agnikarma Shalaka4. Tala Yantra- (scoop or spoon-shaped instruments) - Sim's speculum, Cusco's speculum, Doyen's retractor, Obstetric forceps, Endometrial curette. 5.Nadi Yantra - (Tubular instruments) - Yonivranekshana yantra, Endometrial biopsy cannula, HSG cannula/ Rubin's cannula, Suction cannula, Uttara basti cannula, Leech Wilkinson's cannula, Basti yantra. Describe types of Shastra (Sharp instruments) and utilization: 1. Kartari Shastra - Scissors;Atimukha Shastra - Episiotomy scissorsMandalagra Shastra, umbilical cord-cutting scissors,Shararimukha Shastra - Mayos scissors / simple scissors, Stich removing scissors. 2. Vriddhipatra Shastra - Scalpel 3. Suchi Shastra - different types of needles.									
CO3	Identify & Discuss the uses of instruments with method of sterilization.	CC	MK	K	PT,D	VV-Viva,P-EXAM,OSCE	F&S	I	-	NLHT13.1
CO3	Describe instrument sterilization methods	CC	MK	K	PT,D	INT,VV-Viva	F	I	H-SH	NLHP13.1
CO3	Demonstrate the techniques of holding and using instruments .Enlist uses in *Prasuti & Stree Roga -Sandansham and Swastika yantra*	PSY-GUD	MK	SH	D	VV-Viva,P-VIVA,P-EXAM	F&S	I	-	NLHP13.2
CO3	Demonstrate techniques of holding and using instruments .Enlist	PSY-	MK	SH	D	PP-Practica	F&S	I	-	NLHP13.3

	uses in *Prasuti & Stree Roga*- Shalaka, *Tala & Nadi yantra*	GUD				l,P-EXAM, VV-Viva,P-ID,P-VIVA				
CO3	Practice techniques of holding and using Sharp instruments. Enlist uses in *Prasuti and Stree roga*	PSY-GUD	MK	SH	D	P-ID,VV-Viva	F&S	I	-	NLHP13.4

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 13.1	Instruments used in Obstetrics and Gynaecology	**(1 hr)** Teacher will fecilitate students to get familiarize with Instruments commonly used in Obstetrics and Gynaecology and discuss methods of sterilization for blunt and sharp instruments Students will document instruments with, 1. Identification 2. Description 3. Uses 4. Advantages & Disadvantages

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 13.1	Instrument sterilization methods	**(1hr)** Teacher will enable students to experience the method processing of instruments Students will have exposure to - 1. Disinfection of Instruments 2.Scrubbing methods 3. Sterilization methods for blunt instruments 4 Serilization methods for sharp instruments

NLHP 13.2	Instruments -*Sandansha and Swastika yantra*	**(2hrs)** Teacher will demostrate techniques of holding and using instruments - *Sandanmsha and Swastika yantra* Students will practice the technique of holding and using - 1. *Sandansha Yantra* (Pincer like or dissecting forceps) – *Annigraha* – plain non-toothed forceps; Sannigraha – Toothed forceps 2. *Swastika Yantra* (Cruciform like Forceps) - Allies forceps, Vulsellum, Sponge holding forceps, Cheatle's forceps, Kocher's forceps, Babcock's forceps, Needle holder, Artery forceps, Babcock's forceps, Ovum forceps, Green armytage forceps, Cervical punch biopsy forceps.
NLHP 13.3	Instruments - Shalaka,*Tala & Nadi yantra*	**(2hrs)** Teacher will demonstrate techniques of holding & using instruments - Shalaka, Tala and Nadi yantra Students will practice the technique of holding and using - 3. Shalaka Yantra- (Rod like instruments) - Uterine sound, Hegar's dilator , Uterine curette, endometrial biopsy currette, Anterior vaginal wall retractor, Agnikarma shalaka. 4.*Tala Yantra* (Scoops or spoon-shaped instruments - *Dvi Tala yantra* - Sim's speculum, Endometrial curette, Cusco's speculum, Doyen's retractor, Obstetric forceps. 5. *Nadi Yantra* (Tubular instruments)- *Yonivranekshana yantra*, Leech Wilkinson's HSG cannula, Rubin's cannula, Suction cannula, *UttaraBasti* cannula, Vaginal douching syrrenge, *Basti yantra.*
NLHP 13.4	Sharp instruments.	**(1hr)** Teacher will demonstrate holding & using various *Shastra* (sharp instruments) Students will practice the technique of holding & using - 1. *Kartari Shastra* - Scissors; *Atimukha Shastra* - Episiotomy Scissors, *Mandalagra Shashtra* -Umbilical cord cutting Scissors, *Shararimukha Shastra* - Mayos Scissors / Simple scissors, Stitch removing Scissors 2. *Vriddhipatra Shastra* – Scalpel 3. *Suchi Shastra* – different types of needles

Topic 14 Stree Rugna Parikshana - Gynaecological Examination (LH :2 NLHT: 1 NLHP: 4)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO2, CO6	Enumerate history taking in Gynaecology.	CK	MK	K	DIS,L& PPT	P-CASE,P-VIVA,RK, PP-Practical,CL-PR	F&S	I	-	LH
CO2, CO6	Elaborate essential components of Gynaecological history taking.	CK	MK	K	CBL,L &PPT ,CD,DIS	PP-Practical,P-VIVA,SBA,P-CASE,P-EXAM	F&S	I	-	NLHT14.1
CO2, CO6	Acquire the knowledge of Gynecological examination- Breast examination, Abdominal examination, Pelvic , Per rectal examination and plan investigations	CAP	MK	SH	L&PPT ,PL	VV-Viva,P-PRF,P-EXAM,PP-Practical,P-VIVA	F&S	I	-	LH
CO2, CO6	Demonstrate General - Physical & Systemic examination in Gynaecology Breast examination.	PSY-GUD	MK	SH	D-M,CBL,SDL ,D-BED,RP	RK,P-CASE,P-PRF,P-EXAM,VV-Viva	F&S	I	-	NLHP14.1
CO2, CO6	Demonstrate Abdominal Examination in Gynaecology – Inspection, Palpation, Percussion & Auscultation	PSY-GUD	MK	SH	D-BED, SIM,D-M,D,CBL	P-PRF,P-VIVA,VV-Viva,DOAP,OSCE	F&S	I	-	NLHP14.2
CO2, CO6	Demonstrate Vaginal Examination - Inspection & Palpation of External genitalia.Speculum examination, Bimanual examination, Rectovaginal & Per Rectal examination.	PSY-GUD	MK	SH	SIM,DL ,PT,TBL,CD	OSCE,DOAP,P-CASE,P-EXAM ,P-PRF	F&S	I	-	NLHP14.3

CO2	Plan Diagnostic procedures - Cervical & Vaginal smear, Colposcopy, Endometrial sampling & Culdocentesis.	CS	MK	KH	L_VC,L &GD,L RI,CD, CBL	S-LAQ,VV -Viva,P-VI VA,P- EXAM	F&S	I	-	NLHP14.4

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 14.1	Gynaecological history taking.	**(1hr)** Teacher will discuss essential components of Gynaecological history taking based on case scenario / clinical case and on various essential components viz , Age, parity & complaint specific elicitation of history - Chief complaints in chronological order Important aspects of Gynaecological history Pelvic pain Vaginal discharge Menstrual abnormality & abnormal uterine bleeding Presence of Urinary / Fecal incontinence Something coming down per vagina Past Obstetric history Past Gynaecological history Past Medical & Surgical history Marital & Sexual history – Dyspareunia , Vaginismus Contraceptive history Drug history Students will comprehend ,discuss and record in prescribed case proforma.

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity

NLHP 14.1	Examination in Gynaecology including Breast	**(1hr)** Demonstration on Manikin / Clinical case by the teacher - Physical examination: Appearance, Built ,Nutrition, Height,Weight, Edema, Pallor, Cyanosis, Icterus, Clubbing, Secondary sexual characters, BP Pulse, Respiration & Temperature Systemic examination : C V S, Respiratory system, G I system, Neurological system Clinical Breast Examination: Breast size, Symmetry, Skin, Areola & Nipple Student will observe and emulate examination on Manikin / case under guidance. Teacher will provide feedback to improve skill of students.
NLHP 14.2	Abdominal Examination in Gynaecology	**(1hr)** Demonstration of Abdominal examination by the teacher on Model / Manikin / Clinical Case - Prerequisites : Obtain consent & introduce self Ask the patient to void urine Accompany female attendant Stand on right side of the patient Position of patient -Dorsal supine position Abdomen is exposed fully "9 region Abdominal assessment" Steps : 1.Inspection 2.Palpation 3.Percussion 4.Auscultation Students will observe and emulate Abdominal examination under guidance of teacher on Model/ Manikin/Clinical case. Teacher will provide feedback to improve skill of students.
NLHP 14.3	Vaginal ,Recto vaginal & Per Rectal examination	**(1hr)** Teacher will demonstrate examination of external genitalia, Internal genitalia & Recto vaginal examination

on Model / Manikin / Clinical case
Steps :

1. Pre-requisites - Consent, Privacy, good source of light, gloved hands & Examination specific preparedness –

Bladder emptying
Position : Dorsal supine position / Dorsal lithotomy position /Sim's or Lateral position

2. Demonstration of External Genital organs – Inspection & palpation

A .Inspection of External Genitalia – Vulva
Labia majora & Labia minora
Clitoris
Urethra
Fourchette
Vaginal Introitus
Bartholin's gland
Gynaecological perineum
Anus
B. Palpation of External Genitalia & Vagina
Urethra & Bartholin gland

3. Demonstration of Per speculum examination

		Visualization with Sim's speculum & Anterior vaginal wall retractor /Cusco's speculum Note the findings of Vagina on inspection & Speculum examination Note the cervical findings 4. Demonstration of Bimanual examination / Pelvic examination Note the Size ,Position & Mobility of Uterus Palpation of Fornices & Adnexa 5. Demonstration of Recto vaginal & Per rectal examination Inspection & Palpation of Rectovaginal area (Gynaecological perineum) -Palpate rectovaginal septum , Pouch of douglas , Posterior surface of uterus , fornices and uterosacral ligaments Per rectal examination - Understand indications and perform with gloved lubricated index finger Summarize the findings/case Students will emulate and document in the journal .
NLHP 14.4	Plan Diagnostic procedures	**(1hr)** Teacher will explain the indications and demonstrate diagnostic procedures -Cervical & Vaginal smear collection, Colposcopy, Endometrial sampling & Culdocentesis Students will plan the diagnostic procedure on the given case scenario.

Topic 15 Artava Vyapad - Menstrual Disorders (LH :6 NLHT: 2 NLHP: 4)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3

CO2	Explain *Nidana, Samprapti, Lakshana and Chikitsa of Ashta-Artava Dushti.*	CC	MK	K	L&PPT	P-VIVA,S-LAQ,P-REC,VV-Viva,COM	F&S	I	-	LH
CO2	Acquire comprehensive understanding of *Ashta-Artava Dushti.*	CAP	MK	KH	REC,DIS,L&PPT ,CBL,CD	S-LAQ,P-REC,CBA,VV-Viva	F&S	I	-	NLHT15.1
CO2	Explain *Nidana, Samprapti, Lakshana* and *Chikitsa of Artava kshaya* with understanding of Oligomenorrhoea and Hypomenorrhoea	CC	MK	K	DIS,L&PPT	VV-Viva,S-LAQ,P-REC	F&S	I	-	LH
CO2	Identify, record and plan the management of *Artava Kshaya* - Oligomenorrhoea & Hypomenorrhoea	CS	MK	KH	CBL,CD,DIS	SP,SBA,P-CASE,P-VIVA,VV-Viva	F&S	I	-	NLHP15.1
CO2	Explain polycystic Ovarian Syndrome (PCOS) – Aetiology, Pathophysiology, Clinical features, Investigations, consequences and management	CC	MK	K	L&PPT ,CD	S-LAQ,VV-Viva	F&S	I	-	LH
CO2	Describe *Nidana, Samprapti, Lakshana* and *Chikitsa of Anartava*Describe etiology, types, clinical features, differential diagnosis, diagnosis and management of Amenorrhoea.	CC	MK	KH	L&PPT ,CBL,CD	S-LAQ,CBA,P-VIVA	F&S	I	-	LH
CO2, CO6	Diagnose Amenorrhoea and plan management.	CS	MK	KH	D-BED, CBL,DIS,CD,PBL	CBA,SP,S-LAQ,P-VIVA,VV-Viva	F&S	I	-	NLHP15.2
CO2,	Diagnose and plan management of Poly Cystic Ovarian Syndrome	CS	MK	KH	CD,CB	SP,P-CASE	F&S	I	-	NLHP15.3

CO6	(PCOS)				L,LRI,DIS	,VV-Viva,RK,P-VIVA				
CO2, CO6	Explain *Nidana, Samprapti, Lakshana and Chikitsa of Asrugdara* and *Artava Vruddhi.*	CC	MK	K	CD,CBL,L&PPT	VV-Viva,CBA,COM,SBA,S-LAQ	F&S	I	-	LH
CO2, CO6	Describe etiology, types, clinical features, differential diagnosis, diagnosis and management of Abnormal uterine bleeding.	CC	MK	K	L&PPT,CD,CBL,LRI	S-LAQ,CBA,VV-Viva	F&S	I	-	LH
CO2, CO6	Describe - *Artava Kshaya, Anartava, Asrugdara & Artava Vruddhi.*	CC	MK	K	PER,REC,DIS,CBL	SBA,CBA, PM,CL-PR, VV-Viva	F&S	I	-	NLHT15.2
CO2, CO6	Identify the causes and plan management of *Asrugdara* and *Artava Vruddhi.*	CS	MK	KH	CD,LRI,D-BED,CBL,DIS	VV-Viva,SP,CBA,COM,S-LAQ	F&S	I	-	NLHP15.4

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 15.1	Ashtartava dusti	**(1hr)** Teacher will provide case scenarios pertaining to various artava dushti and students will analyse the characteristics of Artava and identify the respective dosha involvement with recitation of shlokas.
NLHT 15.2	*Artava kshaya, Anartava , Asrugdara & Artava vruddhi*	**(1hr)** Students will be divided into groups to present cases of *Artava kshaya, Anartava , Asrugdara & Artava vruddhi* Teacher will assess and give remark.

Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 15.1	Artava kshaya - Oligomenorrhoea & Hypomenorrhoea	**(1 hr)** Students will document the case in prescribed journal proforma and 1. Evaluate in relation to Age, Weight, H-P-O axis dysregulation, Endocrine Disorders, Androgen producing tomours, Tubercular endometritis and drugs 2. Plan management Teacher will assess and provide feedback.
NLHP 15.2	Anartava - Amenorrhoea evaluation and management	**(1hr)** Student will document the case in prescibed journal proforma and note the clinical type with 1. Evaluation- i) Clinical examination ii) In depth investigations 2. Plan of management; Shodhana / Shamana Teacher will assess and guide in planning the management based on the type of Amenorrhoea.
NLHP 15.3	Poly Cystic Ovarian Syndrome (PCOS)	**(1 hr)** Teacher will enable students to determine signs,symptoms, results of investigations and plan management of Poly Cystic Ovarian Syndrome based on case scenario / clinical case 1. Analyse main concerns – Menstrual abnormalities, Symptoms of hyperandrogenemia , subfertility, weight gain 2. Analyse diagnostic criteria -Biochemical abnormalities (Hyperandrogenemia,

		hyperinsulinemia, hyperlipidaemia, hyper prolactaenemia , low FSH , hyper secretion of LH) 3. Plan management -Conservative(sansodhana & sansamana)/ Surgery Students will comprehend and evaluate Poly Cystic Ovarian Syndrome.
NLHP 15.4	Management of *Asrugdara* and *Artava Vruddhi* - Structrual and Non-structural / Systemic causes	**(1hr)** Students will document the case in the prescibed journal proforma under the guidance of teacher with 1.Evaluation and classification i) Structural causes (PALM) -Polyp, Adenomyosis, Leiomyoma & Malignancy ii) Non-structural systemic causes(COEIN) -Coagulopathy, Ovulatory dysfunction, Endometrial, Iatrogenic and Not yet identified 2.Plan of management Teacher will assess and give remarks.

Topic 16 Rajonivritti - Menopause (LH :2 NLHT: 1 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2	Define *Rajonivrutti* – Menopause and explain the symptoms with changes in organs	CK	MK	K	LS,L&PPT	VV-Viva,CR-RED,S-LAQ	F&S	I	-	LH
CO2	Understand Endocrinology of Menopause and management options with emphasis on role of *Rasayana Chikitsa*	CK	MK	K	CD,L&PPT	VV-Viva,S-LAQ	F&S	I	-	LH
CO2, CO6	Discuss Hormone Replacement Therapy (HRT)	CK	NK	K	L&PPT,DA,DIS,CBL	INT,VV-Viva,CR-RED,PRN,CL-PR	F&S	I	-	NLHT16.1

CO2	Diagnose Menopause	CAN	MK	KH	CD,CBL,D-BED,LRI,SIM	P-PRF,P-CASE,CBA,VV-Viva	F&S	I	-	NLHP16.1
CO2	Plan management of Menopause	CS	MK	KH	DA,CBL,CD,DIS	P-CASE,RK,SP,CBA,S-LAQ	F&S	I	-	NLHP16.2

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 16.1	Hormone Replacement Therapy (HRT)	**(1hr)** Students will present Indications, Contraindications, Risk factors and complications of Hormone Replacement Therapy in Menopause. Review of research paper / publications Teacher will assess the presentations and discuss the alternate therapies .

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 16.1	Menopause	**(1hr)** Students will document following in the prescribed journal proforma under the guidance of teacher - 1. History taking with special reference to Age, Period of Amenorrhoea and Symptoms such as hot flash and night sweats 2. Physical examination 3. Hormonal Assay Teacher will assess and give remarks.

NLHP 16.2	Plan management of Menopause	**(1hr)** Teacher will present a case scenario and students will learn and present plan of management with following components - 1. Counselling 2. Advice on Diet, Life style and Meditation 3. Rasayana and Phytoestrogens 4. Symptomatic management

Topic 17 Yoni Vyapad - Disorders of Female Reproductive system (LH :13 NLHT: 3 NLHP: 10)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2	Enlist *Yonivyapad - S*ankhya, D*oshanusara bheda, Samanya Nidana, Upadrava and Sadhya-Asadhyata*	CC	MK	K	CBL,REC,L&PPT	VV-Viva,S-LAQ,P-REC	F&S	II	-	LH
CO2	Explain *Nidana, samprapti, Lakshana and Chikitsa of Udavarta, Vandhya, Vipluta ,Paripluta Vatala Yonivyapad.*	CC	MK	K	CBL,L&PPT ,REC	P-REC,VV-Viva,S-LAQ	F&S	II	-	LH
CO2	Explain *Nidana, samprapti, Lakshana and Chikitsa of Rudhirakshara, Vamini, Sramsini, Putraghni, Pittala Yonivyapad.*	CC	MK	K	CBL,REC,L&PPT	P-REC,S-LAQ,VV-Viva	F&S	II	-	LH
CO2	Explain *Nidana, Samprapti, Lakshana and Chikitsa of Atyananda, Karnini, Acharana, Aticharana, Shleshmala*	CC	MK	K	REC,CD,L&PPT	VV-Viva,S-LAQ,P-REC	F&S	II	-	LH
CO2	Explain *Nidana, Samprapti, Lakshana and Chikitsa of Shandi, Phalini, Mahati, Suchivaktra, Sarvaja*	CC	MK	K	REC,CD,L&PPT ,CBL	P-REC,VV-Viva,S-LAQ	F&S	II	-	LH

CO2	Explain *Nidana, samprapti, Lakshana and Chikitsa of Antarmukhi, Shuska, Arajaska, Lohita kshaya, Upapluta, Prakcharana Yonivyapad.*	CC	MK	K	L&PPT ,REC	VV-Viva,S-LAQ,P-REC	F&S	II	-	LH
CO2	Explain S*amanya Chikitsa Siddhanta* of *Yonivyapad* and *Pathya-Apathya.*	CC	MK	K	REC,CBL,CD, L&PPT ,PL	VV-Viva,PA,CBA,S-LAQ	F&S	II	-	LH
CO2	Diagnose and plan management of *Udavarta (Kastartava) / Vatala/ Vipluta /Paripluta Yonivyapad.*	CS	MK	KH	SIM,CD ,DA,PBL,LRI	VV-Viva,CBA,P-REC, RK,SBA	F&S	II	-	NLHP17.1
CO2, CO6	Diagnose and plan management of *Pittala/ Rudhirakshara/ Karnini/ Acharana/ Aticharana Yonivyapad.*	CS	MK	KH	DA,CD, CBL,D-BED,LRI	SP,P-CASE ,PM,P-VIVA,CBA	F&S	II	-	NLHP17.2
CO2	Memorize and recite S*hlokas* of *Yonivyapad.*	CK	MK	K	REC	VV-Viva,P-REC	F&S	II	-	NLHT17.1
CO2	Define Dysmenorrhoea. Expalin types – Primary & Secondary, aetiology, clinical signs and symptoms, investigations with treatment.	CC	MK	K	CBL,CD,L&PPT ,D-BED,DA	CBA,SP,S-LAQ,VV-Viva,PM	F&S	II	-	LH
CO2, CO6	Diagnose Dysmenorrhoea and plan management	CS	MK	SH	PBL,LRI,CD,DA,D-BED	P-CASE,VV-Viva,CBA,SBA	F&S	II	-	NLHP17.3
CO2	Define Endometriosis and Adenomyosis . Explain causes, clinical symptoms, investigations and treatment	CC	MK	K	L&PPT ,DA,LRI,CD,C	CBA,VV-Viva,S-LAQ	F&S	II	-	LH

					BL					
CO2, CO6	Diagnose and plan management of Endometriosis and Adenomyosis.	CS	MK	SH	LRI,PBL,CBL, D-BED, DA	VV-Viva,CBA,PM,P-CASE,SP	F&S	II	-	NLHP17.4
CO2	Define Pelvic Inflammatory Disease (PID). Explain aetiology, Types, clinical diagnostic criteria, Investigations, complications and management.	CC	MK	K	CD,LRI,DIS,L &PPT	S-LAQ,VV-Viva	F&S	II	-	LH
CO2, CO6	Diagnose and plan management of Pelvic Inflammatory Disease (PID)	CS	MK	SH	CD,D-BED,CBL,LRI,DA	SP,SBA,VV-Viva,CBA,P-CASE	F&S	II	-	NLHP17.5
CO2	Explain Role of *Panchakarma* in *Yoni Vyapad*	CAP	MK	K	DIS,CBL,PER, CD,LRI	VV-Viva,CR-RED,PRN,S-LAQ	F&S	II	-	NLHT17.2
CO2, CO6	Present case studies on *Yonivyapad*	AFT-RES	MK	SH	PER,D-BED,CD,CBL	P-PRF,CR-RED,VV-Viva,CL-PR,CBA	F&S	II	-	NLHP17.6
CO2	Explain Cervical erosion and Ectropion – Aetiology, Clinical features, Investigations and Management	CC	MK	K	L&PPT,CD,CBL,D	VV-Viva,S-LAQ,CBA	F&S	II	-	LH
CO2, CO6	Diagnose and Plan management of Cervical erosion.	CS	MK	SH	PBL,CD,D-BED,CBL,LRI	SP,DOAP, VV-Viva,CBA,P-CASE	F&S	II	-	NLHP17.7
CO2,	Diagnose and plan management of *Yoni Kandu* - Pruritus Vulvae.	CS	MK	SH	D-BED,	VV-Viva,P	F&S	II	-	NLHP17.8

CO6					CBL,CD,L&PPT	M,P-CASE				
CO2, CO6	Define Pelvic organ prolapse (POP) and explain entities with conservative and surgical treatment options -1.Vaginal Prolapse -Cystocele,Cystourethrocele, Rectocele, Enterocele 2.Uterovaginal prolapse -Uterine prolapse ,	CC	MK	K	CD,L&PPT	S-LAQ,VV-Viva	F&S	II	-	LH
CO2, CO6	Diagnose and plan management of Vaginal prolapse – Cystocele & Rectocele.	CS	MK	KH	D-BED,D-M,CBL,PBL,CD	VV-Viva,S-LAQ,P-VIVA,CBA,P-CASE	F&S	II	-	NLHP17.9
CO2, CO6	Diagnose and plan management of Uterovaginal prolapse.	CS	MK	KH	CBL,D,CD,DA,PBL	S-LAQ,P-CASE,CBA,SP,P-VIVA	F&S	II	-	NLHP17.10
CO2	Explain the causes and management of -1. Dyspareunia2. Vaginismus3. Presacral neuralgia4.Constitutional nymphomania 5. Effluvium seminis	CC	MK	KH	CD,L&PPT,CBL	VV-Viva,S-LAQ	F&S	II	-	LH
CO2, CO6	Present case studies on different *Yonivyapad.*	AFT-RES	MK	KH	DA,RP,DIS,LRI,PER	VV-Viva,P-EXAM,CL-PR,S-LAQ,P-VIVA	F&S	II	-	NLHT17.3

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 17.1	*Shlokas* of *Yonivyapad*	**(1 hr)** Students will recite *Shlokas* of *Yonivyapad* from *Brihatrayi*.

NLHT 17.2	*Panchakarma* in *Yonivyapad*	**(1 hr)** Teacher will divide students into groups and allot topics on *Shodhana Chikitsa* in *Yonivyapad*. Students will review research publications / clinical cases and present in class. Teacher will assess and discuss importance of *Panchakarma* in *Yonivyapad*.
NLHT 17.3	Case studies on different *Yonivyapad*	**(1hr)** Students will be divided into smaller groups, each group will be given a case scenario to present . Teacher will analyse and give remarks.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 17.1	*Udavarta (Kastartava) / Vatala/ Vipluta /Paripluta yonivyapad.*	**(1hr)** Teacher will provide case scenarios with clinical features of *Udavarta, Vatala, Vipluta* and *Paripluta Yonivyapad.* Students will diagnose by- 1. Analysis of *lakshana* 2. Discussion on *samprapti vighatana* based on *dosha* involved. 3. Examination and investigations. Student will discuss management plan with *Shodhana*, *Shamana* and *Sthanik Chikitsa and* document in prescribed journal proforma. Teacher will assess and provide feedback.

NLHP 17.2	*Pittala/ Rudhirakshara/ Karnini/ Acharana/ Aticharana yonivyapad*	**(1hr)** Teacher will provide case scenarios with clinical features of *Pittala/ Rudhirakshara/ Karnini/ Acharana/ Aticharana yonivyapad.* Students will diagnose by- 1. Analysis of *lakshana* 2. Discussion on *samprapti vighatana* based on *dosha* involved. 3. Examination and investigations. Student will discuss management plan with *Shodhana*, *Shamana* and *Sthanik Chikitsa and* document in prescribed journal proforma. Teacher will assess and provide feedback.
NLHP 17.3	Dysmenorrhoea	**(1hr)** Student will document case in prescribed journal proforma. 1. History taking to elicit Primary / Secondary dysmenorrhea Menstrual history - Age of Menarche & relation of the onset Dysmenorrhoea with menarche. Obstetric history : Association of Dysmenorrhoea with previous delivery History of Intra Uterine Contraceptive Device use, Oral Contraceptive Pills ,Depot Medroxyprogesterone acetate (DMPA), Progestin Intrauterine System 2. General physical examination

		3. Abdominal examination 4. Pelvic examination 5. Investigations 6. Plan management -Primary / Secondary Teacher will assess and provide feedback.
NLHP 17.4	Endometriosis and Adenomyosis.	**(1 hr)** Student will document the case in prescribed journal proforma. 1. History taking : Chief complaints with reference to severe cyclical pain in lower abdomen mostly during menstruation - Dysmenorrhoea, Dyspareunia and Dyschezia 2. Gynaecological examination - i) Abdominal examination ii) Vaginal examination : Bimanual examination : Uterus-size Rectovaginal mobility Tenderness Fornices Adnexae Palpation of Pouch of douglas

		Rectovaginal septum iii) Rectal examination 4.Investigations : 5.Differential diagnosis 6.Plan management of Endometriosis /Adenomyosis Teacher will discuss cases with clinical outcome.
NLHP 17.5	Pelvic Inflammatory Disease (PID)	**(1 hr)** Student will document case in prescribed journal proforma. 1. History taking – Analysis of symptoms - Pain abdomen, Vaginal discharge, Menstrual disturbance (menorrhagia) 2. General examination : Acute / Chronic Record vitals – Temperature, Pulse, Respiratory rate Per abdomen : Elicitation of tenderness in lower abdomen Per vaginal : Offensive vaginal discharge, tenderness on movement of cervix , fornices tenderness and fullness of posterior fornix 3. Differential diagnosis 4. Investigations Teacher will assess and discuss management plan.

NLHP 17.6	Case presentation on *Yonivyapad*	**(1hr)** Teacher will divide students into groups and allot topics of Yonivyapad to each group. Student will review clinical case studies / systematic review of research publications of Yonivyapad alloted to them and present in class. Teacher will discuss and assess the presentations on clinical cases and provide feedback.
NLHP 17.7	Cervical erosion	**(1 hr)** Student will document case in prescribed journal proforma. 1. History taking – Analysis of symptoms 2. General examination Per abdomen : Per speculum : Vagina, Cervix - lesion/ breach in portion to be documented, white discharge, any spotting / bleeding Per vaginal – Uterus / Fornices 3. Investigations : 4. Plan management Teacher will discuss management options and provide feedback on cases.

NLHP 17.8	*Yoni kandu* - Pruritus Vulvae	**(1hr)** Teacher will discuss a case scenario / clinical case of Yoni Kandu -Pruritus Vulvae 1.History taking and examination 2. Analyse aetiology –Vaginal discharge, local skin lesions, infections, allergy, systemic diseases 3.Plan management -i) Locl hygiene ii) Drug application - local and/or systemic Students will discuss and document in the prescribed journal proforma.
NLHP 17.9	Cystocele & Rectocele	**(1hr)** Teacher will explain and demonstrate Cystocele & Rectocele on manikin / clinical case with discussion on following - 1. Histrory taking – i) Predisposing (acquired /congenital) ii) Aggravating (postmenopausal atrophy, chronic cough, constipation, obesity, multiparity, weight lifting, under nutrition, smoking 2 Examination : i. General – Body Mass Index , Signs of myopathy or neuropathy, features of chronic airway disease, abdominal mass ii. Composite examination- Inspection and Palpation : Vaginal, Rectal and Recto vagina. 1. Diagnosis - Cystocele / Urethrocele / Rectocele / Enterocele/ Vault prolapse 2. Plan of management Students will observe and document in the precibed journal proforma

NLHP 17.10	Uterovaginal prolapse	**(1hr)** Teacher will expalin and demonstrate Uterovaginal prolapse on manikin / clinical case with discussion on - 1. Histrory taking – i) Predisposing (acquired /congenital) ii) Aggravating (postmenopausal atrophy, chronic cough, constipation, obesity, multiparity, weight lifting, under nutrition, smoking 2. Examination : i) General – Body Mass Index , Signs of myopathy or neuropathy , features of chronic airway disease , abdominal mass ii) Composite examination- Inspection and Palpation : Vaginal , Rectal and Recto vagina 3. Diagnosis : Uterine prolapse / Uterovaginal prolapse 4. Assigning degrees of Uterine prolapse - First/Second/Third/Procedentia 5. Plan of management – conservative / surgical Students will observe, discuss and record in the prescribed journal proforma.

Topic 18 Vandhyatwa - Infertility (LH :4 NLHT: 3 NLHP: 8)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2	Elaborate the concept of *Vandhyatwa, Bheda* and *various Nidana - Aharaja, Viharaja,Yoni Vyapadjanya , Shukra Doshaja, Artava Doshaja, Akalyoga* and *Atmadoshajanya.*	CC	MK	K	L&PPT	P-VIVA,VV-Viva,S-LAQ,P-EXAM	F&S	II	-	LH
CO2	Describe *Vandhyatwa Chikitsa and Pathya-Apathya.*	CC	MK	K	L&PPT ,DIS	P-VIVA,VV-Viva,S-LAQ	F&S	II	-	LH
CO2, CO3	Discuss Role of *Panchakarma in Vandhyatwa.*	CC	MK	K	CD,TBL,PER, FC,L&GD	CBA,P-VIVA,PM,P-EXAM,VV-Viva	F&S	II	H-PK	NLHT18.1

CO2	Define Infertility and elaborate Female factors of Infertility, Investigations and guidelines of management.	CC	MK	K	L&PPT	VV-Viva,S-LAQ	F&S	II	-	LH
CO2, CO6	Perform Evaluation of Female partner in Infertility.	CAP	MK	KH	DIS,CD,PBL,PT,CBL	P-VIVA,SPS,S-LAQ,VV-Viva,P-CASE	F&S	II	-	NLHP18.1
CO2	Describe Male factors of Infertility with Investigations and guidelines of management.	CC	MK	K	L&PPT	VV-Viva,S-LAQ,COM	F&S	II	-	LH
CO2, CO6	Perform evaluation of Male partner in Infertility.	CAP	MK	SH	DIS,CBL,LRI,CD,D-BED	P-CASE,SBA,CR-RED,SP,INT	F&S	II	-	NLHP18.2
CO2	Discuss *Shukra Dushti* and semen abnormalities.	CC	MK	K	DL,CD,LRI,CBL,PER	CL-PR,VV-Viva	F&S	II	-	NLHT18.2
CO2	Demonstrate Semen Analysis and Interpretation of parameters.	CAP	MK	KH	LRI,PT,DL,CD,CBL	P-EXAM,VV-Viva,P-VIVA,CBA	F	II	-	NLHP18.3
CO2	Demonstrate and interpret Ultrasound / Follicular study.	CAP	MK	KH	LRI,L&PPT,CBL,CD	VV-Viva,P-VIVA	F	II	-	NLHP18.4
CO2	Evaluate Tubal Patency by Hystero Salpingography (HSG).	CE	DK	KH	X-Ray,D,L_VC,CD,CBL	CBA,S-LAQ,P-ID,VV-Viva	F&S	II	-	NLHP18.5

CO2	Demonstrate cervical mucous study / test -Fern testSpinbarkket	PSY-GUD	MK	KH	LRI,D,PT	INT,P-CASE	F	II	-	NLHP18.6
CO2	Describe Assisted Reproductive Techniques (ART) and ART act.	CK	NK	K	L_VC,L &PPT , CBL,DIS	COM	F	II	-	NLHT18.3
CO2	Gain insight of Intra Uterine Insemination (IUI).	CK	DK	K	D,L_VC	VV-Viva,PP-Practical	F	II	-	NLHP18.7
CO2	Present case of Infertility.	AFT-RES	MK	SH	PBL,X-Ray,D-BED,PER,CBL	CL-PR,VV-Viva,P-CASE,SBA,PRN	F&S	II	-	NLHP18.8

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 18.1	Role of *Panchakarma in Vandhyatwa*	**(1hr)** Students will have Class presentation / Class seminar / Group discussion / Project work/ Flipped class room on *Panchakarma t*reatment options in *Vandhytwa.* Teacher will assess and provide feedback.
NLHT 18.2	Shukra Dushti and semen abnormalities	**(1hr)** Teacher will discuss identification of *Shukra Dusti* and various abnormalities of Semen Student will analyze various nomenclature related to abnormalities of Semen viz, Aspermia, Hypospermia, Oligozooospermia,Polyzoospermia, Azoospermia , Asthenozoospermia,Leucocytospermia, Necrozoospermia Teratozoospermia and

		Oligoasthenoteratozoospermia.
NLHT 18.3	Assisted Reproductive Techniques (ART)	**(1hr)** Teacher will help students familiarize with various Assisted Reproductive Techniques (ART) with help of Video demonstration and discuss about ART act.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 18.1	Female partner evaluation in Infertility	**(1hr)** Teacher will guide the students for - History taking : Specify & discuss with reference to Age,Duration and type of Infertility, Contraceptive history, Sexual history, Menstrual history, Previous treatment history, Obstetric history, Gynaecological history, History of past illness, Personal and Family history General Physical, Systemic and Local examination Investigations Teacher will assess the findings,counsel and plan the management.
NLHP 18.2	Male partner evaluation in Infertility	**(1hr)** Teacher will guide the students for - 1. History taking; Specify & discuss with reference to Age, Occupation, Habits, Duration, Environmental exposure, Sexual history, Past illness 2. General Physical, systemic and local examination 3. Investigations Teacher will assess,counsel and plan management.
NLHP 18.3	Semen Analysis.	**(1hr)** Teacher will discuss time and method of collection, Interpretation of report and plan the management

		Students will comprehend and discuss.
NLHP 18.4	Interpret Ultrasound / Follicular study	**(1hr)** Teacher will discuss - 1. Pelvic Ultrasound – Assessment of Uterine cavity / Size / Endometrial Thickness, free fluid in pouch of douglas 2. Follicular study – Interpret the follicular size / Ovulation 3.Counsel and Plan management Student will comprehend and discuss.
NLHP 18.5	Hysterosalpingography (HSG)	**(1hr)** Teacher will demonstrate Hysterosalpingography and discuss about the consent, time of procedure, method, precautions and possible complications with the help of Video /X-ray film. Students will comprehend,understand and document.
NLHP 18.6	Cervical mucous tests	**(1hr)** Teacher will demonstrate Fern test and Spinbarkette 1. Procedure of collecting cervical mucous under aseptic precautions 2. Observation and interpretation Students will observe ,assess and document
NLHP 18.7	Intra Uterine Insemination (IUI)	**(1hr)** Teacher will demonstrate Intra uterine Insemination (IUI) with Video /Clinical case. Students will observe and analyze.

NLHP 18.8	Practical case presentation on Infertility	**(1hr)** Student will present case of Infertility focusing on - History taking Examination – Male / Female Investigations Interpretation / Identify the cause Plan management - *Shodhana / Shamana / Sthanika upakrama*/ Integrative Teacher will evaluate and give remarks

Topic 19 Vyadhi Vinischaya Upaya - Diagnostic Tools and Techniques (LH :1 NLHT: 1 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2	Discuss various diagnostic procedures in Gynaecology viz PAP smear, Colposcopy, Cervical biopsy, Endometrial biopsy, Ultrasound, Hysteroscopy, Laproscopy, Magnetic resonance imaging, Computed Tomography.	CC	DK	K	X-Ray, CBL,L &PPT	CBA,INT	F&S	II	-	LH
CO2	Interpret Ultrasound, Hysteroscopy, Laparoscopy, Magnetic resonance imaging, Computed Tomography in Gynaecology.	CC	DK	K	LRI,CD ,X-Ray, CBL,L &PPT	INT,SBA,V V-Viva,CO M,CBA	F	II	-	NLHT19.1
CO2	Perform PAP test, Visual inspection examination and Colposcopy.	CAP	DK	KH	CD,CB L,D-M, L_VC,D	INT	F	II	-	NLHP19.1
CO2, CO6	Observe the procedure for Cervical biopsy and Endometrial biopsy	CC	DK	K	CBL,D-M,L_V C	INT	F	II	-	NLHP19.2

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 19.1	Diagnostic tools	**(1hr)** Teacher will assist students in comprehending and interpreting Ultrasound, Hysteroscopy, Laparoscopy, Magnetic resonance imaging, Computed Tomography reports in Gynaecology.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 19.1	PAP test,Visual inspection and Colposcopy	**(1hr)** Teacher will demonstrate the procedures of PAP test, Visual inspection methods and Colposcopy on model / manikin / clinical case/video. Students will perform and analyze the steps - 1 . Prerequisites and Procedure : Educate about the time of test Consent Collection of required material for respective test i) PAP test - Gloves , Instruments ,Spatula , Slides ii) Visual Inspection : Visual Inspection with Acetic acid (VIA) and Visual inspection with Lugol's Iodine (VILI) iii) Colposcopic visualization 2. Procedure 3. Interprete findings.
NLHP 19.2	Cervical biopsy and Endometrial biopsy	**(1hr)** Teacher will demonstrate the procedures of collecting Cervical and Endometrial Biopsy on model / manikin / clinical case / video. Students will discuss-

		1. Prerequisites : Consent, premedication, sterilized instruments 2. Procedure of collection and preservation 3. Interpretation of results 4. Conselling and referral for further management

Topic 20 Sthanika Upakrama - In situ Treatment Modalities (LH :1 NLHT: 2 NLHP: 7)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO3	Discuss the role of *Sthanika Upakrama* in *Streeroga - Yoni dhavana ,Yoni prakshalana , Pichu dharana, Yoni varti, Yoni lepana, Yoni avachurnana, Yoni purana, Yoni dhoopana, Kshara karma, Agni karma and Uttarabasti.*	CC	MK	K	L&PPT ,L_VC	RK,S-LAQ, COM,VV-Viva,P-VIVA	F&S	II	-	LH
CO3	Discuss *Purvakarma, Pradhana Karma* and *Paschat Karma* of - *Kshara Karma* and *Agni Karma* with indications, contraindications, precautions and time of procedure.	CC	MK	K	L_VC,L &PPT ,CD,CB L	C-VC,VV-Viva,SP,CB A	F&S	II	-	NLHT20.1
CO3, CO6	Discuss *Purvakarma, Pradhana Karma* and *Paschat Karma* of *Uttarabasti* with indications, contraindications, precautions and time of procedure.	CC	MK	K	D-M,L &PPT	P-VIVA,VV-Viva,COM	F&S	II	-	NLHT20.2
CO3, CO6	Perform *Yonidhavana and Yoniprakshalana*	PSY-GUD	MK	SH	CBL,D-M,D	DOPS,OSCE,DOPS,VV-Viva,P-VIVA	F&S	II	-	NLHP20.1
CO2	Perform *Yoni - Pichu dharana*	PSY-GUD	MK	SH	D,PT	DOAP,DOPS,DOPS,P	F&S	II	-	NLHP20.2

						-PRF,VV-Viva				
CO2	Perform *Yoni-varti* insertion.	PSY-GUD	MK	SH	PT,RLE	DOPS,VV-Viva,DOPS,OSCE,P-PRF	F&S	II	-	NLHP20.3
CO2	Perform *Yoni lepana.*	PSY-GUD	MK	SH	RLE,PT,D	P-PRF,VV-Viva,OSCE,DOAP	F&S	II	-	NLHP20.4
CO2	Perform *Yoni- avachoornana.*	PSY-GUD	MK	SH	D,PT	DOPS,OSCE,DOPS,DOAP,P-PRF	F&S	II	-	NLHP20.5
CO2	Perform *Yonipurana*	PSY-GUD	MK	SH	RLE,D,PT	DOAP,DOPS,DOPS,P-PRF,VV-Viva	F&S	II	-	NLHP20.6
CO2	Perform *Yoni dhoopana.*	PSY-GUD	MK	SH	PT,RLE,D	P-PRF,OSCE,DOPS,VV-Viva,DOPS	F&S	II	-	NLHP20.7

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 20.1	*Kshara karma and Agni karma*	**(1hr)** Teacher will discuss *Purvakarma, Pradhana karma* and *Paschat karma* of - *Kshara karma* and *Agni karma* with indications, contraindications, precautions and time of procedure. Students will comprehend.

NLHT 20.2	*Uttara Basti*	**(1hr)** Teacher will discuss *Purvakarma, Pradhana Karma* and *Paschat karma* of *Uttarabasti* with indications, contraindications, precautions and time of procedure. Students will comprehend.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 20.1	*Yonidhavana and Yoniprakshalana*	**(1 hr)** Teacher will debrief the Indications, contraindications, time of procedure and ensure prerequisites - Consent, preparation of Kashaya / Kwatha (decoction) as per Standard Operating Procedure (SOP), Sterilized instruments, gloves, linen, Syringe, Douche can, procedure Student will perform *Yonidhavana and Yoniprakshalana* and discuss special precautions Complete documentation of the procedure in prescibed journal.
NLHP 20.2	*Yoni-Pichu dharana*	**(1hr)** Teacher will debrief the Indications and contraindications,time of procedure and ensure prerequisites :Consent, medication -Taila (oil) / Ghrita (ghee) / Kwatha (decoction) / other proposed drug form,as per Standard Operating Procedure,Sterilized instruments,linen,Sterile Pichu (Tampoon) Students will perform the procedure and discuss special precautions Complete documentation of the procedure in the prescribed journal proforma
NLHP 20.3	*Yoni-varti*	**(1hr)** Teacher will debrief the Indications,contraindications,time of procedure and ensure prerequisites : Consent,Sterilized instruments, linen,Varti / Suppository Students will perform the procedure of insertion of Yoni varti and discuss special precautions Complete documentation of the procedure in prescribed journal proforma.

NLHP 20.4	Yoni lepana	**(1 hr)** Teacher will debrief the indication,contraindications,time of procedure of Yoni lepana and ensure prerequisites : consent ,sterilized instruments, drug of application, linen. Students will perform the procedure of Yonilepana and discuss special precautions Complete documentation of the procedure in the prescribed journal proforma.
NLHP 20.5	*Yoni-avachoornana*	**(1hr)** Teacher will debrief the Indications, contraindications, time of procedure and ensure prerequisites :consent , sterilized instruments, linen, drug Students will perform the procedure *Yoni-Avachoornana* and discuss on special precautions Complete documentation of the procedure in the prescribed journal proforma.
NLHP 20.6	*Yonipurana*	**(1hr)** Teacher will debrief the indications,contraindications, time of procedure and ensure prerequisites : consent, sterilized instruments, linen,oil /decoction Students will perform the procedure Yonipurana and discuss special precautions Complete documentation of the procedure in the prescribed journal proforma.
NLHP 20.7	*Yoni dhoopana*	**(1hr)** Teacher will debrief the Indications,contraindications,time of procedure and ensure prerequisites: consent, sterilized instruments,linen,dhoopana yantra,dhoopana drugs. Students will perform the procedure*Yoni dhoopana* and discuss special precautions. Complete documentation of the procedure in the prescribed journal proforma.

Topic 21 Stree Jananganga Granthi Evam Arbuda - Benign & Malignant lesions of Female Reproductive System (LH :4 NLHT: 2 NLHP: 4)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2,	Elaborate *Nidana, Samprapti, Bheda, Lakshana and*	CC	MK	K	L&PPT	S-LAQ,VV-	F&S	III	-	LH

CO3	*Chikitsa* of *Yonyarsha* and *Yonikanda*.					Viva				
CO2, CO3	Explain the pathologies, clinical features, investigations and treatment of Bartholinitis, Bartholin's abscess and Bartholin's cyst	CAP	MK	K	L&PPT	S-LAQ,VV-Viva	F&S	III	-	LH
CO2, CO3	Diagnose and manage Bartholin abscess / Cyst.	CAN	MK	KH	D-M,CBL,D	S-LAQ,COM,SBA,RK,VV-Viva	F&S	III	-	NLHP21.1
CO2, CO3	Explain the pathology, clinical features, investigations and treatment of Polyp – Cervical and Endometrial (Fibroid polyp)	CC	MK	K	L&PPT	VV-Viva,S-LAQ	F&S	III	-	LH
CO2, CO3	Diagnose and manage Uterine Polyp	CAN	MK	KH	PBL,D-M,CD,CBL,D	COM,INT,CBA,VV-Viva,SBA	F&S	III	-	NLHP21.2
CO2, CO3	Explain Fibroid Uterus -Types, Clinical features, Investigations and Management	CC	MK	K	DIS,L&PPT	COM,S-LAQ,VV-Viva	F&S	III	-	LH
CO2, CO3	Diagnose and manage Fibroid Uterus.	CAN	MK	KH	D-BED,CBL,D-M,PBL,CD	P-PS,P-PRF,VV-Viva,P-VIVA,P-CASE	F&S	III	-	NLHP21.3
CO2, CO3, CO6	Elaborate Benign conditions of Ovary – Ovarian tumour and Tubo-ovarian mass	CC	MK	K	L&PPT,D,CBL,PBL,CD	S-LAQ,COM,VV-Viva,SBA	F&S	III	-	NLHT21.1
CO2, CO3	Diagnose and plan management of Tubo-ovarian mass	CS	MK	KH	CD,D,CBL,D-M,LRI	S-LAQ,SBA,CBA,QZ,INT	F	III	-	NLHP21.4
CO2, CO3	Identify Premalignant and Malignant lesions of Female reproductive organs.Analyze Vaccination in cervical cancer.	CC	DK	K	CD,CBL,L&PP	SBA,COM,CBA,INT,	F	III	-	NLHT21.2

					T ,X-Ray,LRI	VV-Viva				

Non Lecture Hour Theory		
S.No	**Name of Activity**	**Description of Theory Activity**
NLHT 21.1	Benign conditions of Ovary and Fallopian tube	**(1 hr)** Teacher will elaborate and demonstarte benign conditions of Adnexa (ovary and fallopian tube) Students will discuss differential diagnosis and investigation methods.
NLHT 21.2	Premalignant and Malignant lesions	**(1 hr)** Teacher will elaborate clinical diagnosis of premalignant and malignant lesions of Female reproductive organs and discuss diagnostic aids. students will analyze complains, clinical examination and laboratory findings and importance of Vaccination in cervical cancer.

Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 21.1	Diagnose and plan management of Bartholin Cyst /Abscess	**(1 hr)** Teacher will demonstrate following on case of Bartholin abscess or Cyst / model / with video - 1. Clinical examination of vulva with swelling and pain. 2. Surgical management of - a) Cyst – Excision / Marsupialization b) Abscess – Incision and Drainage Student will discuss differential diagnosis and observe Excision/Marsupialization/Incision and Drainage and document.
NLHP 21.2	Uterine Polyp	**(1 hr)** Students will analyze signs and symptoms and discuss differential diagnosis with following steps -

		1. History taking - clinical presentations; Vaginal discharge, Pain in lower abdomen,Intermenstrual bleeding, Irregular bleeding 2. General examination 3. Pelvic examination : Per speculum : any mass Uterus : size 4. Investigations : 5. Differential diagnosis Teacher will demonstrate polypectomy on model/ video/ case
NLHP 21.3	Fibroid Uterus.	**(1 hr)** Students will discuss following steps and analyze diagnosis; 1. History taking - clinical presentation; Heavy, Painful and Irregular menstruation, lump in abdomen, Pain in lower abdomen, pressure symptoms 2. General examination 3. Abdominal examination : with / without enlarged firm mass 4. Pelvic examination : Uterus - size , aditional mass 5. Investigations 6. Differential diagnosis Teacher will guide students to plan conservative management and demonstrate surgical management of fibroid uterus.

NLHP 21.4	Ovarian tumour / Tubo-ovarian mass	**(1 hr)** Teacher will demonstarte a diagnosed case of Tubo-ovarian mass and surgical management with help of video/ case. Students will analyze method of diagnosis and appropiate treatment option with following steps - 1. History taking - clinical presentation; Pain in lower abdomen and heaviness / associated symptoms 2. General examination 3. Abdominal examination : Abdominal mass 4. Pelvic examination : Tuboovarian mass 5. Investigations : 6. Differential diagnosis : 7. Complications : 8. Plan treatment : Young patient vs Parous woman

Topic 22 Guhya Roga - Sexually Transmitted Diseases (LH :2 NLHT: 1 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO3	Describe *Hetu, Samprapti, Lakshana, Upadrava,* and *Chikitsa* of *Upadamsha, Firanga,* and *Puyameha*	CC	MK	KH	L&PPT	COM,S-LAQ,VV-Viva	F	III	-	LH
CO2, CO3	Describe Sexually Transmitted Diseases with causative micro-organisms, pathology, clinical features, investigations and management.	CC	MK	KH	L&PPT	VV-Viva,S-LAQ	F&S	III	-	LH
CO2, CO3, CO6	Diagnose and plan management of *Guhya Roga* (Sexually Transmitted Diseases)	CS	MK	KH	L&GD, CD,LRI	CBA,QZ ,VV-Viva,SBA	F&S	III	-	NLHT22.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 22.1	*Guhya roga* (Sexually Transmitted Diseases)	**(1 hr)**

		Teachers will elaborate clinical features, diagnosis and management of *Guhya roga* (STDs) Students will have Group discussion and analysis of preventive measures.

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity

Topic 23 Yoni srava - Vaginal Discharge (LH :1 NLHT: 1 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO3	Describe *Hetu, Samprapti, Lakshana and Chikitsa of Shweta Pradara*.	CC	MK	KH	L&PPT	VV-Viva,S-LAQ	F&S	III	-	LH
CO2, CO3	Explain Infections of Pelvic organs ; i) Due to a specific infection ii) Due to sensitive reaction iii) Due to Vaginal discharge or urinary contamination	CC	MK	K	DIS,PER,L&PPT ,D-BED,CBL	P-PRF,CL-PR,SP,P-VIVA,PRN	F&S	III	-	NLHT23.1
CO2, CO3, CO6	Diagnose and manage Abnormal Vaginal Discharges / Leucorrhoea (Non-infective)	CAN	MK	SH	CBL,PBL,D,CD,DA	CBA,P-CASE,OSCE,VV-Viva,DOAP	F&S	III	-	NLHP23.1
CO2, CO3, CO6	Diagnose and manage Abnormal Vaginal Discharges (Infective)	CAN	MK	SH	PT,DA,D-BED,CBL,CD	P-CASE,P-VIVA,VV-Viva,P-PRF,DOAP	F&S	III	-	NLHP23.2

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 23.1	Infections of Pelvic organs	**(1 hr)**

		Students will be asigned with research project on Infections of Pelvic organs and have peer discussion on underlying etiology. Teacher will elaborate Infections of Pelvic organs - i) Due to specific infection ii) Due to sensitive reaction iii) Due to Vaginal discharge or urinary contamination

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 23.1	Abnormal Vaginal Discharges / Leucorrhoea	**(1 hr)** Teacher will diagnose and manage Abnormal Vaginal Discharge (Non-infective) Students will discuss importance of steps involved - History taking, General Physical Examination, Pelvic Examination, Investigation, Differential diagnosis and analyze management of Lucorrhoea.
NLHP 23.2	Abnormal Vaginal Discharges (Infective)	**(1 hr)** Teacher will diagnose and manage Abnormal Vaginal Discharge (Infective) Students will discuss importance of steps involved - History taking, General Physical Examination, Pelvic Examination, Investigation, Differential diagnosis and analyze management.

Topic 24 Stana Roga - Breast Disorders (LH :3 NLHT: 1 NLHP: 3)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO2	Explain the Anatomy of Breast and Anatomical defects.	CAP	MK	K	L&PPT	S-LAQ,COM,VV-Viva	F&S	III	-	LH
CO2, CO3		CC	MK	K	L&PPT	VV-Viva,S-LAQ	F&S	III	-	LH

	Elaborate Stana Roga - Stana Keelaka, Stana Granthi and Stanarbuda with Nidana, Samprapti, Lakshana and Chikitsa.									
CO2, CO3	Describe causative factors, etiopathogenesis, clinical features, investigations, complications and management of Mastalgia, Fibroadenoma, Carcinoma breast.	CC	DK	K	L&PPT	S-LAQ,VV-Viva	F&S	III	-	LH
CO2	Demonstrate Self Breast examination	PSY-SET	MK	KH	SIM,D-M,L_VC,CBL,D	P-PRF,VV-Viva,DOAP,OSCE,SP	F&S	III	-	NLHT24.1
CO2, CO3, CO6	Illustrate Investigations in diseases of Breast - 1. Sono-mammogram 2. Fine Needle Aspiration Cytology (FNAC)3. Biopsy	CAN	MK	KH	CBL,CD,LRI,L_VC,L&PPT	P-VIVA,PM,VV-Viva,SP,P-EXAM	F&S	III	-	NLHP24.1
CO2, CO3, CO6	Diagnose and manage Fibroadenoma Breast	CAN	MK	KH	D-M,CBL,CD,X-Ray	VV-Viva,P-CASE,S-LAQ,CBA,SBA	F	III	-	NLHP24.2
CO2, CO3, CO6	Diagnose Breast carcinoma	CAN	MK	K	CBL,LRI,L&PPT ,CD	SBA,VV-Viva,CBA	F&S	III	-	NLHP24.3

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 24.1	Self Breast examination	**(1hr)** Teacher will demonstrate steps of self breast examination by Video / Pictorial demonstration. Students will discuss the importance of Self Breast examination.

Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 24.1	Investigations in diseases of Breast	**(1 hr)** Teacher will discuss various methods of investigation in the diseases of Breast and demonstrate procedure by Video / Pictorial demonstration Students will analyze and interprete - i) Sono-mammogram ii) Fine Needle Aspiration Cytology (FNAC) iii) Biopsy
NLHP 24.2	Fibroadenoma Breast	**(1 hr)** Teacher will demonstarte diagnosis and management of Fibroadenoma Breast on case/ model. Students will elaborate following steps in cases of Fibroadenoma Breast - 1. History taking 2. Examination 3. Investigations 4. Counselling 5. Management 6. Indications for referral
NLHP 24.3	Clinical diagnosis of Breast carcinoma	**(1 hr)** Teacher will demonstarte clinical features and methods of diagnosis of Breast carcinoma on case/ model. Students will elaborate following steps in cases of diagnosis of Breast carcinoma - 1. History taking 2. Examination 3. Provisional diagnosis

		4. Need of Investigations 5. Diagnosis and referral

Topic 25 Shastra Karma in Stree Roga - Surgical Procedures in Gynaecology (LH :4 NLHT: 1 NLHP: 4)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO3	Elaborate Preoperative preparation with respect to *Prasuti Stree Roga*	CC	NK	K	L&PPT	S-LAQ,VV-Viva	F	III	-	LH
CO3	Explain Postoperative care in *Prasuti Stree Roga*	CC	NK	K	L&PPT	S-LAQ,VV-Viva	F	III	-	LH
CO3	Explain *Granthi Nirharana* (Cystectomy)	CC	DK	K	L&PPT	S-LAQ,VV-Viva	F&S	III	-	LH
CO3	Explain *Garbhashaya Arbuda Nirharana* (Myomectomy)	CC	DK	K	L&PPT	VV-Viva,COM,S-LAQ	F	III	-	LH
CO3	Explain the Steps of Laparoscopic Tubal Ligation.	CC	DK	K	L_VC	P-VIVA,VV-Viva	F&S	III	-	NLHT25.1
CO3, CO6	Describe the steps of surgical procedure in *Udaragata Garbhashaya Nirharana* - Abdominal Hysterectomy	CC	DK	K	D,CBL, L_VC	VV-Viva,COM,S-LAQ	F&S	III	-	NLHP25.1
CO3, CO6	Describe the steps of surgical procedure in *Yonimarga-gata Garbhashaya Nirharana* - Vaginal Hysterectomy	CC	DK	K	D,CBL, L_VC	S-LAQ,VV-Viva,COM	F&S	III	-	NLHP25.2
CO3, CO6	Describe the steps of surgical procedure in *Garbhashayamukha Vistrutikarana* and *Lekhana*. (Dilatation and Curettage)	CC	DK	K	D,D-M,CBL	S-LAQ,P-VIVA,VV-Viva,COM	F&S	III	-	NLHP25.3
CO3, CO6	Describe the steps of Surgical sterilization – Tubectomy and Vasectomy	CC	DK	K	L_VC,D	VV-Viva,S-LAQ	F&S	III	-	NLHP25.4

Non Lecture Hour Theory		
S.No	**Name of Activity**	**Description of Theory Activity**
NLHT 25.1	Laparoscopic Tubal Ligation	**(1 hr)** Teacher will demonstrate laparoscopic procedure of Tubal Ligation through Video / Case Students will observe and document steps of Laparoscopic Tubal Ligation.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 25.1	Abdominal Hysterectomy	**(1 hr)** Teacher will demonstrate the steps of surgical procedure in *Udaragata Garbhashaya Nirharana* - Abdominal Hysterectomy on Video / Case. Students will observe the steps of Abdominal Hysterectomy, discuss precuations and possible complications.
NLHP 25.2	Vaginal Hysterectomy	**(1 hr)** Teacher will demonstrate the steps of surgical procedure in *Yonimarga-gata Garbhashaya nirharana* - Vaginal Hysterectomy on Video / Case. Students will observe the steps of Vaginal Hysterectomy, discuss precuations and possible complications.
NLHP 25.3	Dilatation and Curettage	**(1 hr)** Teacher will demonstrate steps of Dilatation and Curettage and explain the possible complications on Video / Case. Students will observe, discuss the indications and document.
NLHP 25.4	Tubectomy and Vasectomy	**(1 hr)**

		Teacher will demonstrate steps of Surgical sterilization – Tubectomy and Vasectomy and explain the possible complications on Video / Case. Students will observe,analyze the methods and document.

Topic 26 Stree Roga Sambandhi Aushadhi- Classical Formulations (LH :1 NLHT: 1 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO3	Demonstrate Vishishta Phalashruti (Indication) of Formulations used in Prasuti and Streeroga. Churna Kalpana: Pushyanuga Churna, Shatpushpa Churna, Shatavari Churna, Nagakeshara Churna,Ghrita Kalpana: Phalaghrita, Kashmaryadi Ghrita, Vidaryadi GhritaTaila Kalpana: Dahtakyadi taila, Shatpushpa taila, Jatyadi Taila, Narayana Taila,Asava and Arishta: Ashokarishta, Kumaryasava,Rasa aushadhi: Rajahpravartini Vati, Pratapalankeshwar Rasa, Garbhapala Rasa, Pushpadhanva Rasa,Kwatha : Nyagrodhadi Kwatha, Dashmoola Kwatha, Panchavalakala KwathaPaka Kalpana: Sobhagya Shunthi Paka, Puga Khanda/ Puga Paka,Avaleha: Jeerakavaleha, Kushmandavaleha	CAP	MK	KH	L&GD, DA	INT,VV-Viva	F&S	III	-	LH
CO3	Adapt the indication and importance of formulation used in *Prasuti Stree Roga.*	CAP	MK	KH	L&GD, PL,PER ,DIS,D A	SP,CL-PR, PRN,QZ	F	III	-	NLHT26.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 26.1	Application of Formulations in *Prasuti Stree Roga*	**(1 hr)** Students will have class room presentation/ Peer discussion Teacher will guide students to devlope critical thinking about use of formulations in *Prasuti Stree*

		Roga.

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity

Topic 27 National Maternal Health Programs (LH :1 NLHT: 2 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO5	Explain the aims, objectives, and benefits of Maternal and Child Health care programs -"Janani Suraksha yojana""Janani Shishu Suraksha Karyakram""Pradhan Mantri Surakshit Matritva Abhiyan""Mission Indradhanush""Menstrual hygiene""LaQshya Program""MAA program"	CC	MK	K	L&PPT	QZ ,S-LAQ ,VV-Viva,COM	F&S	III	-	LH
CO5	Follow Sexual and Reproductive Health Rights.	AFT-REC	MK	KH	BL,DIS, PL,FC	COM,VV-Viva,INT,QZ	F	III	-	NLHT27.1
CO5	Explain the goals, objectives, and strategies of Reproductive and Child Health programme.	CC	MK	K	FV,DIS	QZ ,VV-Viva,RK	F&S	III	-	NLHT27.2

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 27.1	Sexual and Reproductive Health Rights	**(1 hr)** Students will do research on Sexual and Reproductive Health rights and have peer discussion. Teacher will explain the key points on sexual health, sexual rights, reproductive health and reproductive rights
NLHT 27.2	Reproductive and Child health care services	**(1 hr)**

		Teacher will equip students to get familiarized with Health care facility and functionality. Students will discuss and document the aspects of early identification and tracking of the individual beneficiary throughout the reproductive lifecycle of women and promote, monitor and support the reproductive, maternal, new-born and child health (RMNCH) schemes/programme delivery and reporting.

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity

Topic 28 Medical ethics, Record keeping and Audit in Obstetrics and Gynaecology (LH :1 NLHT: 1 NLHP: 1)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO6	Explain the importance of Medical ethics and documentation in Obstetrics & Gynaecology	CC	MK	K	L&PPT	S-LAQ,RK, VV-Viva	F&S	III	-	LH
CO6	Demonstrate documentation and audit in *Prasuti Stree Roga*	CAP	MK	KH	DIS,PT	RK	F&S	III	-	NLHT28.1
CO6	Practice documentation - Antenatal Care, Intranatal care, Postnatal care, Tubectomy, Birth registry, Surgery and referral.	CAP	MK	KH	FV,BL,IBL,PT	VV-Viva,RK	F&S	III	-	NLHP28.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 28.1	Documentation and audit	**(1 hr)** Teacher will demonstrate documentation and audit in *Prasuti Stree Roga.* Students will observe and analyze Medical records - registers, consent sheets, case sheets and explain components in audit process.

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity

NLHP 28.1	Medical record documentation	**(1 hr)** Teacher will enable students to gain competency in documentation. Students will Practice documentation in Antenatal Care, Intranatal care, Postnatal care, Tubectomy, Birth registry, Surgery and referral.

Table 4 : NLHT Activity

(*Refer table 3 of similar activity number)

Activity No*	CO No	Activity details
1.1	CO1	Anatomy of female genital organs
1.2	CO1	*Asthi, Sandhi* and *Parimana* of *Stree Shroni*
2.1	CO2	Concept of *Raja, Artava and Shukra*.
2.2	CO1	Physiology of Menstruation.
2.3	CO1	Importance of *Rutukala*
2.4	CO1	*Tridosha* and *Panchamahabhuta* in *Rutuchakra*.
3.1	CO1	*Garbha* and *Garbhavakranti*
3.2	CO1	*Apara, Nabhinadi* and *Garbhodaka Vikaras* (abnormalities of placenta, umbilical cord and amniotic fluid) with clinical significance.
3.3	CO1	*Garbha Poshana* (fetal nourishment) and *Garbha Vridhhikara Bhava.*
3.4	CO1	Month wise fetal development
4.1	CO1	*Garbhini Nidana*: Diagnosis of pregnancy
4.2	CO1,CO4	High Risk Pregnancy
4.3	CO1,CO5	Demographic Statistics in Obstetrics
5.1	CO1,CO5	Abortion
5.2	CO1	Intra uterine growth restriction
5.3	CO1,CO6	Intra uterine fetal demise.
5.4	CO1	*Rakta Gulma*

7.1	CO3,CO4	Essential drugs for labour practice; as per National protocol.
8.1	CO4	Prolonged Labour
8.2	CO4	Postmaturity
9.1	CO4	*Moodhagarbha - Bheda and Gati.*
9.2	CO4	Obstetric Emergencies
9.3	CO1,CO4	Abnormal presentations – face, brow, shoulder presentations
10.1	CO4	Puerperal diseases.
11.1	CO4	Breast milk and feeding techniques.
11.2	CO4	Mastitis and Breast Abscess.
12.1	CO2	Neuroendocrinology with respect to Puberty
12.2	CO2	Applied aspects - Puberty and Adolescence
13.1	CO3	Instruments used in Obstetrics and Gynaecology
14.1	CO2,CO6	Gynaecological history taking.
15.1	CO2	Ashtartava dusti
15.2	CO2,CO6	*Artava kshaya, Anartava , Asrugdara & Artava vruddhi*
16.1	CO2,CO6	Hormone Replacement Therapy (HRT)
17.1	CO2	*Shlokas* of *Yonivyapad*
17.2	CO2	*Panchakarma* in *Yonivyapad*

17.3	CO2,CO6	Case studies on different *Yonivyapad*
18.1	CO2,CO3	Role of *Panchakarma in Vandhyatwa*
18.2	CO2	Shukra Dushti and semen abnormalities
18.3	CO2	Assisted Reproductive Techniques (ART)
19.1	CO2	Diagnostic tools
20.1	CO3	*Kshara karma and Agni karma*
20.2	CO3,CO6	*Uttara Basti*
21.1	CO2,CO3,CO6	Benign conditions of Ovary and Fallopian tube
21.2	CO2,CO3	Premalignant and Malignant lesions
22.1	CO2,CO3,CO6	*Guhya roga* (Sexually Transmitted Diseases)
23.1	CO2,CO3	Infections of Pelvic organs
24.1	CO2	Self Breast examination
25.1	CO3	Laparoscopic Tubal Ligation
26.1	CO3	Application of Formulations in *Prasuti Stree Roga*
27.1	CO5	Sexual and Reproductive Health Rights
27.2	CO5	Reproductive and Child health care services
28.1	CO6	Documentation and audit

Table 5 : List of Practicals

(*Refer table 3 of similar activity number)

Practical No*	CO No	Practical Activity details
1.1	CO1	*Tryavarta Yoni*
1.2	CO1	Spatial orientation and Blood supply of uterus and adnexa
1.3	CO1,CO4	Female bony pelvis
2.1	CO1	*Rajaswala paricharya*
3.1	CO1	*Garbha Samskara* and *Pumsavana Samskara*.
3.2	CO1,CO4	Fetus-in-utero
4.1	CO1	Clinical Diagnosis of pregnancy
4.2	CO1	*Garbha Vikruti*
4.3	CO1,CO4	Antenatal History taking and Examination
4.4	CO1,CO5	Investigations in pregnancy
5.1	CO1	Ectopic pregnancy
5.2	CO1,CO5	*Garbhashaya Mukha Vistrutikarana evam Garbhasaya Lekhana* - Dilatation and Curettage *Garbhashaya Greeva Samvrutikarana* - Cervical Encirclage
5.3	CO1	Intra Uterine Growth Restriction, Oligohydramnios and Polyhydramnios
5.4	CO1,CO6	Intrauterine Fetal Demise (IUFD)
6.1	CO1,CO3,CO6	*Garbhini Pandu* - Anaemia in pregnancy.
6.2	CO1,CO3,CO6	*Yamala-garbha* - Twin Pregnancy (1 hr)

6.3	CO1,CO3,CO6	*Garbhini Jwara* - fever in pregnancy.
6.4	CO1,CO3,CO6	Hypertensive disorders in Pregnancy
6.5	CO1,CO3,CO5	Antepartum Hemorrhage -Placenta previa
6.6	CO1,CO3,CO5	Antepartum Hemorrhage - Abruptio placenta
7.1	CO4,CO5	Labour Room Setup
7.2	CO4,CO5	Diagnosis of Labour
7.3	CO4	Fetal skull and labour
7.4	CO4	Adequacy of pelvis
7.5	CO4	Mechanism of Labour
7.6	CO4	Management of stages of labour
7.7	CO3,CO4	Plot partograph
7.8	CO4	Intrapartum fetal monitoring techniques
7.9	CO4,CO5	Stages of Labour
7.10	CO4	Labour monitoring
7.11	CO3,CO4	Episiotomy
7.12	CO4,CO5	*Jatamatra Paricharya*
8.1	CO4	Preterm labour
8.2	CO4	Postpartum Hemorrhage
8.3	CO4	Retained placenta

8.4	CO4	Postpartum hemorrhage management.
9.1	CO4	Assisted Breech delivery.
9.2	CO4	Assesment of Cephalo-Pelvic Disproportion
9.3	CO4	Complications of *Moodha Garbha*
9.4	CO1,CO3,CO4	1. Bishop's score and Induction/ Augmentation of Labour 2. Assisted labour techniques
10.1	CO4	Examination of a puerperal woman - abdominal, perineal, and breast.
10.2	CO4	*Sootika Vyadhi*
10.3	CO4,CO5	Contraception
11.1	CO4	Techniques of Breastfeeding.
11.2	CO4	Breast Engorgement, Mastitis, Breast abscess
12.1	CO1,CO2	Development of Female reproductive system
12.2	CO1,CO2	Anomalies of Female reproductive system
12.3	CO2	Puberty
12.4	CO2	Identify normal and abnormal Pubertal changes.
13.1	CO3	Instrument sterilization methods
13.2	CO3	Instruments -*Sandansha and Swastika yantra*
13.3	CO3	Instruments - Shalaka,*Tala & Nadi yantra*
13.4	CO3	Sharp instruments.

14.1	CO2,CO6	Examination in Gynaecology including Breast
14.2	CO2,CO6	Abdominal Examination in Gynaecology
14.3	CO2	Plan Diagnostic procedures
14.4	CO2,CO6	Vaginal ,Recto vaginal & Per Rectal examination
15.1	CO2	Artava kshaya - Oligomenorrhoea & Hypomenorrhoea
15.2	CO2,CO6	Anartava - Amenorrhoea evaluation and management
15.3	CO2,CO6	Poly Cystic Ovarian Syndrome (PCOS)
15.4	CO2,CO6	Management of *Asrugdara* and *Artava Vruddhi* - Structrual and Non-structural / Systemic causes
16.1	CO2	Menopause
16.2	CO2	Plan management of Menopause
17.1	CO2	*Udavarta (Kastartava) / Vatala/ Vipluta /Paripluta yonivyapad.*
17.2	CO2,CO6	*Pittala/ Rudhirakshara/ Karnini/ Acharana/ Aticharana yonivyapad*
17.3	CO2,CO6	Dysmenorrhoea
17.4	CO2,CO6	Endometriosis and Adenomyosis.
17.5	CO2,CO6	Pelvic Inflammatory Disease (PID)
17.6	CO2,CO6	Case presentation on *Yonivyapad*
17.7	CO2,CO6	Cervical erosion
17.8	CO2,CO6	*Yoni kandu* - Pruritus Vulvae
17.9	CO2,CO6	Cystocele & Rectocele
17.10	CO2,CO6	Uterovaginal prolapse

18.1	CO2,CO6	Male partner evaluation in Infertility
18.2	CO2,CO6	Female partner evaluation in Infertility
18.3	CO2	Semen Analysis.
18.4	CO2	Interpret Ultrasound / Follicular study
18.5	CO2	Hysterosalpingography (HSG)
18.6	CO2	Cervical mucous tests
18.7	CO2	Intra Uterine Insemination (IUI)
18.8	CO2	Practical case presentation on Infertility
19.1	CO2	PAP test,Visual inspection and Colposcopy
19.2	CO2,CO6	Cervical biopsy and Endometrial biopsy
20.1	CO3,CO6	*Yonidhavana and Yoniprakshalana*
20.2	CO2	*Yoni-Pichu dharana*
20.3	CO2	*Yoni-varti*
20.4	CO2	Yoni lepana
20.5	CO2	*Yoni-avachoornana*
20.6	CO2	*Yonipurana*
20.7	CO2	*Yoni dhoopana*
21.1	CO2,CO3	Diagnose and plan management of Bartholin Cyst /Abscess
21.2	CO2,CO3	Uterine Polyp

21.3	CO2,CO3	Fibroid Uterus.
21.4	CO2,CO3	Ovarian tumour / Tubo-ovarian mass
23.1	CO2,CO3,CO6	Abnormal Vaginal Discharges / Leucorrhoea
23.2	CO2,CO3,CO6	Abnormal Vaginal Discharges (Infective)
24.1	CO2,CO3,CO6	Investigations in diseases of Breast
24.2	CO2,CO3,CO6	Fibroadenoma Breast
24.3	CO2,CO3,CO6	Clinical diagnosis of Breast carcinoma
25.1	CO3,CO6	Abdominal Hysterectomy
25.2	CO3,CO6	Vaginal Hysterectomy
25.3	CO3,CO6	Dilatation and Curettage
25.4	CO3,CO6	Tubectomy and Vasectomy
28.1	CO6	Medical record documentation

Table 6 : Assessment Summary: Assessment is subdivided in A to H points

6 A : Number of Papers and Marks Distribution

Subject Code	Papers	Theory	Practical/Clinical Assessment (200)					Grand Total
			Practical	Viva	Elective	IA	Sub Total	
AyUG-PS	2	200	100	60	10 (Set-TA)	30	200	400

6 B : Scheme of Assessment (Formative and Summative)

PROFESSIONAL COURSE	FORMATIVE ASSESSMENT			SUMMATIVE ASSESSMENT
	First Term (1-6 Months)	Second Term (7-12 Months)	Third Term (13-18 Months)	
Third	3 PA & First TT	3 PA & Second TT	3 PA	**UE****

PA: Periodical Assessment; **TT:** Term Test; **UE:** University Examinations; **NA:** Not Applicable.
**University Examination shall be on entire syllabus

6 C : Calculation Method for Internal assessment Marks

TERM	PERIODICAL ASSESSMENT*					TERM TEST**	TERM ASSESSMENT	
	A 5	B	C	D	E	F	G	H
	1 (15 Marks)	2 (15 Marks)	3 (15 Marks)	Average (A+B+C/3)	Converted to 30 Marks (D/15*30)	Term Test (Marks converted to 30)	Sub Total _/60 Marks	Term Assessment (…./30)
FIRST							E+F	(E+F)/2
SECOND							E+F	(E+F)/2
THIRD						NIL		E
Final IA	Average of Three Term Assessment Marks as Shown in 'H' Column.							
	Maximum Marks in Parentheses *Select an Evaluation Method which is appropriate for the objectives of Topics from the Table 6 D for Periodic assessment. Conduct 15 marks assessment and enter marks in A, B, and C. ** Conduct Theory (100 Marks)(MCQ(20*1 Marks), SAQ(8*5), LAQ(4*10)) and Practical (100 Marks) Then convert to 30 marks.							

6 D : Evaluation Methods for Periodical Assessment

S. No.	Evaluation Methods
1.	Practical / Clinical Performance
2.	Viva Voce, MCQs, MEQ (Modified Essay Questions/Structured Questions)
3.	Open Book Test (Problem Based)
4.	Summary Writing (Research Papers/ Samhitas)
5.	Class Presentations; Work Book Maintenance
6.	Problem Based Assignment
7.	Objective Structured Clinical Examination (OSCE), Objective Structured Practical Examination (OPSE), Mini Clinical Evaluation Exercise (Mini-CEX), Direct Observation of Procedures (DOP), Case Based Discussion (CBD)
8.	Extra-curricular Activities, (Social Work, Public Awareness, Surveillance Activities, Sports or Other Activities which may be decided by the department).
9.	Small Project
10.	Activities Indicated in Table 3 - Column G3 as per Indicated I, II or III term in column I3.

Topics for Periodic Assessments

PA	PAPER 1	PAPER 2
PA 1	Topic 1 Topic 2	Topic 12
PA 2	Topic 3	Topic 13 Topic 14
PA 3	Topic 4	Topic 15
TERM TEST 1 – Entire syllabus of Term 1 of Paper 1 and 2		
PA 4	Topic 5	Topic 17
PA 5	Topic 6	Topic 18
PA 6	Topic 7	Topic 20
TERM TEST 2 – Entire syllabus of Term 2 of Paper 1 and 2		
PA 7	Topic 9	Topic 21
PA 8	Topic 10	Topic 23
PA 9	Topic 11	Topic 24

6 E : Question Paper Pattern

III PROFESSIONAL BAMS EXAMINATIONS
AyUG-PS
PAPER-I
Time: 3 Hours Maximum Marks: 100
INSTRUCTIONS: All questions compulsory

		Number of Questions	**Marks per question**	**Total Marks**
Q 1	MULTIPLE CHOICE QUESTIONS (MCQ)	20	1	20
Q 2	SHORT ANSWER QUESTIONS (SAQ)	8	5	40
Q 3	LONG ANSWER QUESTIONS (LAQ)	4	10	40
				100

Similar for Paper II.

6 F : Distribution of theory examination

Paper 1 (PRASUTI TANTRA - OBSTETRICS)					
Sr. No	**A List of Topics**	**B Marks**	**MCQ**	**SAQ**	**LAQ**
1	**Stree Vishishta Shareera Vigyana - Anatomy of Female Reproductive System**	30	Yes	Yes	Yes
2	**Rutuchakra - Menstrual Cycle**		Yes	Yes	Yes
3	**Garbha Vigyana - Embryology & Fetal Development**		Yes	Yes	Yes
4	**Garbhini Vigyana - Physiology of Pregnancy & Antenatal Care**		Yes	Yes	Yes
5	**Garbha Vyapad - Fetal Pathologies**	40	Yes	Yes	Yes
6	**Garbhini Vyapad - Minor Ailments and Major Disorders of Pregnancy**		Yes	Yes	Yes
7	**Prasava Vigyana - Labour**		Yes	Yes	Yes
8	**Prasava Vyapad - Labour Complications & Obstetric Emergencies.**	30	Yes	Yes	Yes
9	**Moodhagarbha - Obstructed Labour**		Yes	Yes	Yes
10	**Sootika Vigyana - Puerperium**		Yes	Yes	Yes
11	**Stanya Vigyana - Lactation**		Yes	Yes	No
Total Marks		**100**			

Paper 2 (STREE ROGA - GYNAECOLOGY)					
Sr. No	**A List of Topics**	**B Marks**	**MCQ**	**SAQ**	**LAQ**
12	**Stree Prajanananga Nirmana and Vikruti - Development of Female Reproductive System with Anomalies.**	30	Yes	Yes	Yes
13	**Yantra evam Shastra - Instruments**		Yes	Yes	No
14	**Stree Rugna Parikshana - Gynaecological Examination**		No	Yes	No
15	**Artava Vyapad - Menstrual Disorders**		Yes	Yes	Yes
16	**Rajonivritti - Menopause**		Yes	Yes	Yes
17	**Yoni Vyapad - Disorders of Female Reproductive system**	40	Yes	Yes	Yes
18	**Vandhyatwa - Infertility**		Yes	Yes	Yes
19	**Vyadhi Vinischaya Upaya - Diagnostic Tools and Techniques**		Yes	Yes	No

20	**Sthanika Upakrama - In situ Treatment Modalities**		Yes	Yes	Yes
21	**Stree Jananangа Granthi Evam Arbuda - Benign & Malignant lesions of Female Reproductive System**	30	Yes	Yes	Yes
22	**Guhya Roga - Sexually Transmitted Diseases**		Yes	Yes	No
23	**Yoni srava - Vaginal Discharge**		Yes	Yes	Yes
24	**Stana Roga - Breast Disorders**		Yes	Yes	Yes
25	**Shastra Karma in Stree Roga - Surgical Procedures in Gynaecology**		Yes	Yes	Yes
26	**Stree Roga Sambandhi Aushadhi- Classical Formulations**		Yes	Yes	No
27	**National Maternal Health Programs**		Yes	Yes	No
28	**Medical ethics, Record keeping and Audit in Obstetrics and Gynaecology**		No	Yes	No
Total Marks		**100**			

6 G : Instructions for UG Paper Setting & Blue print

1. All questions shall be compulsory.
2. Questions shall be drawn based on Table 6F, which provides the topic name, types of questions (MCQ(Multiple Choice Question), SAQ(Short Answer Question), LAQ(Long Answer Question)).
3. The marks assigned in Table 6F for each topic/group of topics shall be considered as the maximum allowable marks for that topic/group of topics.
4. Ensure that the total marks allocated per topic/group of topics do not exceed the limits specified in Table 6F.
5. Refer to Table 6F before setting the questions. Questions shall be framed only from topics where the type is marked as “YES”, and avoided if marked as “NO”.
6. Each 100-mark question paper shall contain:
   - 20 MCQs
   - 8 SAQs
   - 4 LAQs

7. MCQs:
   - Majority shall be drawn from the Must to Know part of the syllabus.
   - Questions from the Desirable to Know part of syllabus shall not exceed 3.
   - Questions from the Nice to Know part of syllabus shall not exceed 2.

8. SAQs:
   - Majority shall be drawn from the Must to Know part of the syllabus.
   - Questions from the Desirable to Know part of syllabus shall not exceed 1.
   - No questions shall be drawn from the Nice to Know part of syllabus.
   - SAQs shall assess understanding, application, and analysis, rather than simple recall.

9. LAQs:
   - All LAQs shall be drawn exclusively from the Must to Know part of the syllabus.
   - No questions shall be taken from the Desirable to Know or Nice to Know part of the syllabus.
   - Number of LAQs should not exceed one per topic unless maximum marks exceed 20 for the topic.

10. Long Answer Questions shall be structured to assess higher cognitive abilities, such as application, analysis, and synthesis.
11. Follow the guidelines in User Manual III for framing MCQs, SAQs, and LAQs.

6 H : Distribution of Practical Exam

S.No	Heads	Marks
1	Case Taking - 2 cases (15 marks each) • Prasuti - 1 case • Stree Roga - 1 case	30
2	Spotting of Instruments, Drugs, Models and Specimen - • 10 Instruments - Identification, use • 2 Drugs - Identification, indication • 2 Models - Identification • 1 Specimen - Identification	30
3	Clinical Skill Based Examination.	20
4	Structured Viva-Voce - • Shloka recitation - 10 marks • Conceptual knowledge - 10 marks • Diagnostic interpretation - 10 marks • Procedures and practical applications - 10 marks • Therapeutics and management - 10 matks • Preventive care and recent advances - 10 marks	60
5	Practical record - • Prasuti Tantra - 5 Garbhini (Antenatal), 5 Prasava (Labour), 5 Sutika (Postnatal) • Stree Roga - 10 Stree roga(Gynaecological disorders), 5 Sthanika Upakrama (In-situ treatment modalities)	20
6	Internal Assessment	30

7	Electives Set -TA	10
Total Marks		**200**

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Abbreviations

Domain		T L Method		Level		Assessment		Integration	
CK	Cognitive/Knowledge	L	Lecture	K	Know	T-CS	Theory case study	V-RS	V RS
CC	Cognitive/Comprehension	L&PPT	Lecture with PowerPoint presentation	KH	Knows how	T-OBT	Theory open book test	V-KS	V KS
CAP	Cognitive/Application	L&GD	Lecture & Group Discussion	SH	Shows how	P-VIVA	Practical Viva	H-KC	H KC
CAN	Cognitive/Analysis	L_VC	Lecture with Video clips	D	Does	P-REC	Practical Recitation	H-SH	H SH
CS	Cognitive/Synthesis	REC	Recitation			P-EXAM	Practical exam	H-PK	H PK
CE	Cognitive/Evaluation	SY	Symposium			PRN	Presentation	H-SHL	H SHL
PSY-SET	Psychomotor/Set	TUT	Tutorial			P-PRF	Practical Performance	H-SP	H SP
PSY-GUD	Psychomotor/Guided response	DIS	Discussions			P-SUR	Practical Survey	H-KB	H-KB
PSY-MEC	Psychomotor/Mechanism	BS	Brainstorming			P-EN	Practical enact	H-Samhita	H-Samhita
PSY-ADT	Psychomotor Adaptation	IBL	Inquiry-Based Learning			P-RP	Practical Role play	V-DG	V DG
PSY-ORG	Psychomotor/Origination	PBL	Problem-Based Learning			P-MOD	Practical Model	V-RN	V RN
AFT-REC	Affective/ Receiving	CBL	Case-Based Learning			P-POS	Practical Poster	V-RS	V RS
AFT-RES	Affective/Responding	PrBL	Project-Based Learning			P-CASE	Practical Case taking	V-AT	V AT
AFT-VAL	Affective/Valuing	TBL	Team-Based Learning			P-ID	Practical identification	V-SW	V SW
AFT-SET	Affective/Organization	TPW	Team Project Work			P-PS	Practical Problem solving		
AFT-CHR	Affective/ characterization	FC	Flipped Classroom			QZ	Quiz		
PSY-PER	Psychomotor/perception	BL	Blended Learning			PUZ	Puzzles		
PSY-COR	Psychomotor/ Complex Overt Response	EDU	Edutainment			CL-PR	Class Presentation		
		ML	Mobile Learning			DEB	Debate		
		ECE	Early Clinical Exposure			WP	Word puzzle		
		SIM	Simulation			O-QZ	Online quiz		
		RP	Role Plays			O-GAME	Online game-based assessment		
		SDL	Self-directed learning			M-MOD	Making of Model		
		PSM	Problem-Solving Method			M-CHT	Making of Charts		
		KL	Kinaesthetic Learning			M-POS	Making of Posters		

		W	Workshops			C-INT	Conducting interview		
		GBL	Game-Based Learning			INT	Interactions		
		LS	Library Session			CR-RED	Critical reading papers		
		PL	Peer Learning			CR-W	Creativity Writing		
		RLE	Real-Life Experience			C-VC	Clinical video cases		
		PER	Presentations			SP	Simulated patients		
		D-M	Demonstration on Model			PM	Patient management problems		
		PT	Practical			CHK	Checklists		
		X-Ray	X-ray Identification			Mini-CEX	Mini-CEX		
		CD	Case Diagnosis			DOPS	DOPS		
		LRI	Lab Report Interpretation			CWS	CWS		
		DA	Drug Analysis			RS	Rating scales		
		D	Demonstration			RK	Record keeping		
		D-BED	Demonstration Bedside			COM	Compilations		
		DL	Demonstration Lab			Portfolios	Portfolios		
		DG	Demonstration Garden			Log book	Log book		
		FV	Field Visit			TR	Trainers report		
						SA	Self-assessment		
						PA	Peer assessment		
						360D	360-degree evaluation		
						PP-Practical	Practical		
						VV-Viva	Viva		
						DOAP	Demonstration Observation Assistance Performance		
						SBA	Scenario Based Assessment		
						CBA	Case based Assessment		
						S-LAQ	Structured LAQ		
						OSCE	Observed Structured Clinical Examination		
						OSPE	Observed Structured Practical Examination		
						DOPS	Direct observation of procedural skills		

Name of College with LOGO

AYURVEDACHARYA (B.A.M.S.)

THIRD PROFESSIONAL B.A.M.S.

<< Subject Name >>

(SUBJECT CODE : AyUG-)

JOURNAL /ACTIVITY BOOK

Name of the student :

Institutional Roll No. :

Examination Reg. No. :

Academic Year :

(Name of the College)

(Affiliated to –National Commission for Indian System of Medicines, New Delhi &

Name of the University)

Name of the department

Batch- _____

Certificate

This is to certify that, Mr. / Ms. _____, Enrolment Number-_____ has satisfactorily completed the Practicals in (Subject Name) prescribed by the (Name of University) as a part of the Third Professional B.A.M.S. Course.

Examination Seat No.: _____

Sign. of Teacher Sign. of H.O.D.

Date of Examination- _____

Sign. Of Internal Examiner-_____

Sign. Of External Examiner-_____

JOURNAL /ACTIVITY BOOK

<< Subject name >>

(SUBJECT CODE : AyUG -)

Journal Cum Activity Book

DEPARTMENT OF

<< Name of Department >>

Name of the College

INDEX

Sr no	Topic	Date	Page no
1			
2			
3			
4			

Section	Minimum No of cases to be included as per the following guidelines
A.	Garbhini Pareeksha -Antenatal case record (5)
B.	Prasava evum Sutika - Intrapartum & Postnatal record (10)
C.	Stree Roga - Gynaecological case record (10)
D.	Sthanika Upakrama- In-situ Treatment modalities (5)

Section A

GARBHINI PAREEKSHA-ANTENATAL CASE RECORD

Name:

Age:

Occupation:

Marital status:

Religion

OPD No:

IPD No:

DOA:

DOD:

Address:

Diagnosis:

Pradhana Vedana (Avadhiyukta) -

Anubandhi Vedana (Avadhiyukta) -

Vedana Vrittanta -

Poorva Vyadhi Vrittanta -

H/O: HTN / DM / Asthma / TB / HD / Epilepsy / STD / Nephritis / Rickets / Hepatitis

H/O Previous Surgeries:

Kula Vrittanta -

HTN / DM / Asthma / Colour Blindness / Twins / Congenital abnormalities / Bleeding disorders.

Chikitsa Vrittanta -

Vaiyaktika Vrittanta -

Diet: Appetite:

Sleep: Habits:

Bowels: Micturition:

Nature of Work:

Rajo Vrittanta -

Age of Menarche

Previous Menstrual cycle: Regular / Irregular

Prasava Vrittanta - G P A L D

Anartava Kala - L.M.P.

E.D.D.

P.O.G.

Poorva Prasava Vrittanata -

Order of Delivery	Pregnancy events	Labour events	Mode of Delivery	Puerperium	Pregnancy Outcome Live/Stillborn/Sex/Weight

Contraceptive History -

Duration:

Method used: Safe method / IUCD / OCP / Condoms / Others

General Examination -

Pallor :

Oedema :

Cyanosis :

Icterus :

Lymph Nodes :

Breasts :

Height :

Weight :

Pulse :

Temperature :

Blood Pressure :

Respiratory Rate :

Nipples : Normal/ Inverted

Samsthanika Pareeksha (Systemic Examination) -

RS :

CVS :

CNS :

DashavidhaPareeksha

	PRAVARA	**MADHYAMA**	**AVARA**
Prakriti			
Vikruti			
Sara			
Samhanana			
Pramana			
Satmya	Sarva rasa	Madhyama rasa	Ekarasa
Satwa			

Ahara Shakti

Vyayama Shakti

Vaya Baala Madhyama Jeerna

Antenatal Examination (P/A) -

Previous Scar / Any other Observation :

Abdominal Examination :

Fundal Height :

Lie :

Presentation :

FHS :

Vaginal Examination (P/V) -

Investigations -

Hb% :

Blood Group &Rh :

RBS :

BT :

Urine routine :

VDRL :

HbsAg :

HIV :

CT :

TSH :

Platelet count :

Others :

USG -

Immunization -

Chikitsa -

Pathya- Apathya :

Follow up : **Date:**

Complaints :

Weight :

BP:

PR:

Oedema:

Examination :

Investigations

Treatment :

Signature of the Teacher **Signature of the Student**

SECTION B

PRASAVA AND SOOTIKA PAREEKSHA
(INTRAPARTUM & PUERPERAL RECORD)

Name:

Age:

Occupation:

Marital status:

Religion:

OPD No:

IPD No:

DOA:

DOD:

Address

Diagnosis:

Pradhana Vedana -

Aavi Pradurbhava :

Yoni Prasravana :

Garbhodaka Pravaha :

Anubandhi Vedana -

Vedana Vrittanta -

Poorva Vyadhi Vrittanta -

H/O: HTN / DM / Asthma / TB / HD / Epilepsy / STD / Nephritis / Rickets / Hepatitis

H/O Previous Surgeries :

Kula Vrittanta -

HTN / DM / Asthma / Colour Blindness / Twins / Congenital abnormalities / Bleeding disorders

VaiyaktikaVrittanta -

Diet : Appetite :

Sleep : Habits :

Bowels : Micturition :

Nature of Work :

Anartava Kala -

L.M.P : E.D.D: P.O.G:

Poorva Prasava Vrittanta (Obstetric History)

Order of Delivery	Mode of Delivery	Complications if any	Pregnancy Outcome Live/Stillborn/Sex/Weight

Contraceptive History -

Duration :

Method used : Safe method / IUCD / OCP / Condoms / Others

Investigations -

Hb% : HbsAg :

Blood Group &Rh : HIV :

RBS : VDRL :

BT : CT :

TSH : Platelet Count :

Urine routine :

USG

Others –

General Examination

Height :	Pulse :
Weight :	Temperature :
Blood Pressure :	Respiratory Rate :

Samsthanika Pareeksha

RS :

CVS :

CNS :

LABOUR ASSESSMENT (At Admission) -

Udara Pareeksha (P/A) -

Fundal Height:

Presentation:

Uterine contractions:

FHS: _____bpm

Yoni Pareeksha (P/V) -

Cervical Dilatation:

Cervical Effacement:

Status of Membranes : Absent / Present

Time of Rupture :

Mode of rupture : Spontaneous / Artificial

Garbhodaka(Liquor):

Amount: Less / Average /Excess

Colour: White / Yellow / Meconium Stained

Consistency: Thin / Thick

Station of Presenting Part:

Pelvic Assessment : Adequate / Not Adequa

Prasava paricharya / Intervention -

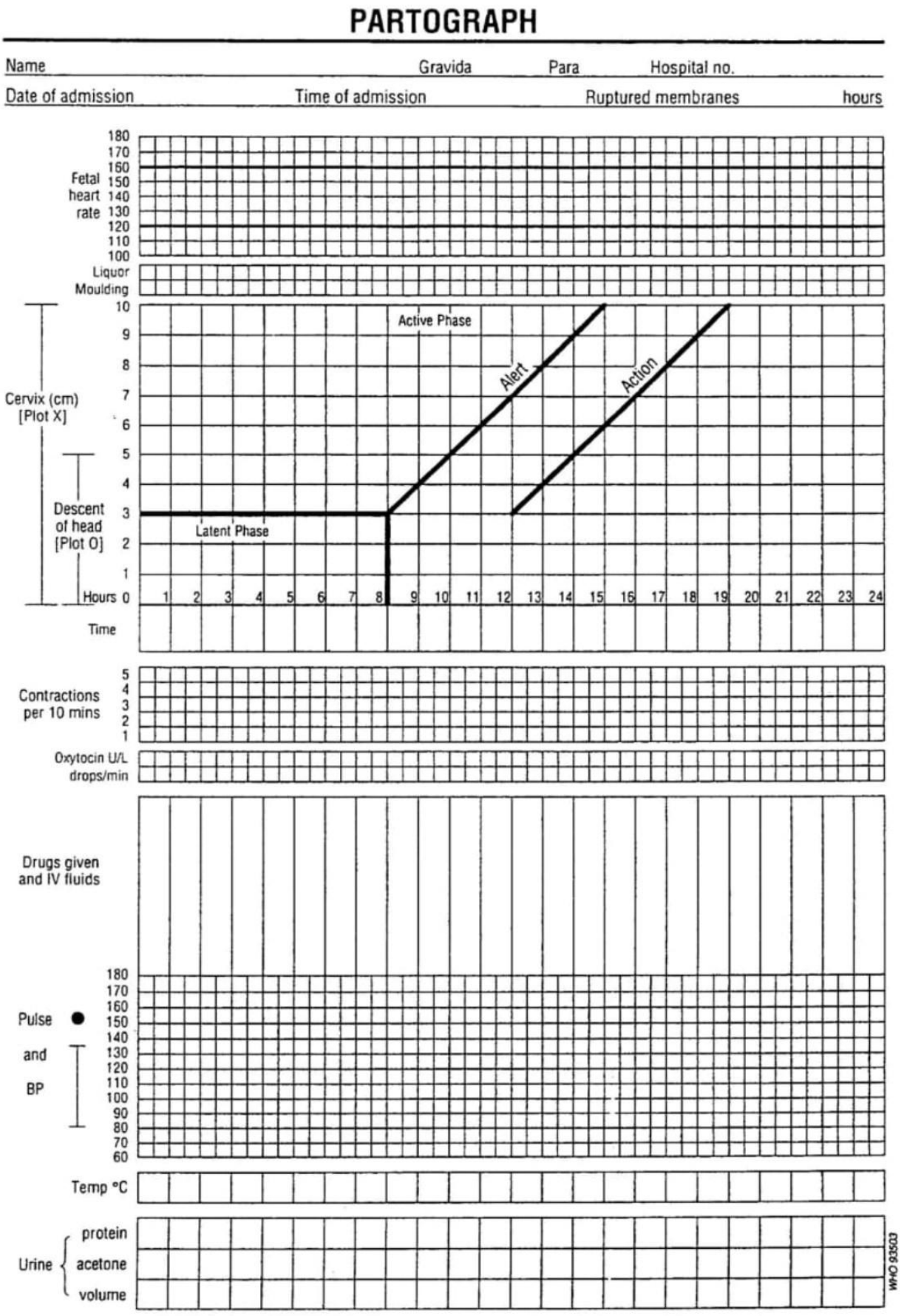
Induction of Labor : YES / NO

Bishop's Score:

Cervix	**Score**			
	0	1	2	3
Dilation	**Closed**	**1-2cm**	**3-4**	**>5cm**
Effacement	**0-30%**	**40-50%**	**60-70%**	**>80%**
Station	**-3**	**-2**	**-1, 0**	**+1, +2**
Consistency	**Firm**	**Medium**	**Soft**	**-**
Position	**Posterior**	**Mid**	**Anterior**	
		Bishop Score	**-**	

Date & Time	**Dilation of cervix**	**Effacement**	**Consistency**	**Position**	**Station**	**Subscore**

WHO SIMPLIFIED PARTOGRAPH



Mode of Assistance -

Vitapa Chedana (Episiotomy)

Prasava Samdansha Yantra (Forceps)

Nirvata Yantra (Ventouse)

Shastra Karma (LSCS)

Indication for Assistance –

Complications (If Any) –

Prasava Kala:

Avyavrutta kala (1st Stage):

Garbha niskramana kala (2nd Stage):

Apara Patana Kala (3rd Stage):

Details of Nabhinaadi / Apara / Jarayu -

Nabhi Naadi Dairgya:

Anya Vikruti: Knot (True/False): Absent/Present

Apara Patana Prakara: Spontaneous / Manual Removal

Weight of Placenta:

Navajata Shishu Vivarana / Newborn Details -

Sex: M /F

Time of Birth:

APGAR score at 1 min:

APGAR score at 5 min:

Weight:

Congenital anomalies if any :

Labour Details :

SOOTIKA PAREEKSHA (POSTNATAL EXAMINATION)

Days	BP	PR	Temp	Height of Uterus	Lochia	Perineum	Lactation (Involution)	SFH
Day 1								
Day 2								
Day 3								
Day 4								
Day 5								

Chikitsa -

Pathya & Apathya -

Advice on Contraception -

Condition on discharge -

Follow up -

Signature of Teacher **Signature of the Student**

SECTION C

STREEROGA PAREEKSHA

GYNAECOLOGICAL CASE RECORD

Name: OPD No:

Age: IPD No:

Occupation: DOA:

Marital status: DOD:

Religion : Address :

Diagnosis:

Pradhana Vedana (Avadhiyukta) -

Anubandhi Vedana (Avadhiyukta) -

Vedana Vrittanta -

Poorva Vyadhi Vrittanta -

H/O: HTN / DM / Asthma / TB / HD / Epilepsy / STD / Nephritis / Rickets / Hepatitis

H/O Previous Surgeries :

Kula Vrittanta -

HTN / DM / Asthma / Colour Blindness / Twins / Congenital abnormalities / Bleeding disorders.

Vaiyaktika Vrittanta -

Diet : Appetite :

Sleep : Habits :

Bowel : Micturition :

Rajo Vrittanta –

Age of Menarche :

Menstrual cycle : Regular / Irregular

Rajah Kala (Duration) :

Interval -

Pramana (Amount) :

Anubandhi Vedana :

Poorva Prasava Vrittanata -

Order of Delivery	Pregnancy events	Labour events	Mode of Delivery	Puerperium

Contraceptive History -

Duration :

Method used : Safe method / IUCD / OCP / Condoms / Others

(A) Ashta Sthana Pareeksha -

Nadi :	Shabda (BP) :
Mootra :	Sparsha (Temp) :
Mala :	Drik :
Jihwa :	Akriti (Built)

(B) Dashavidha Pareeksha -

Prakriti
Sara
Samhanana
Pramana
Satmya
Satwa
Ahara Shakti
Vyayama Shakti
Vaya
Ahara Shakti
Vyayama Shakti
Vaya

Samsthanika Pareeksha -

RS :

CVS :

CNS :

Udara pareeksha / Abdominal Examination (P/A) -

Sthanika Pareeksha (Pelvic Examination) -

P/S :

P/V :

Prayogashala Pareeksha (Investigations) -

(C) Pancha lakshana nidana :

Nidana

Poorva roopa

Roopa

Samprapti

Upashaya / Anupashaya

Upadrava

Sadhyasadhyata

Samprapti Ghataka

Dosha :

Dushya :

Dhatu :

Upadhatu :

Mala :

Agni :

Ama :

Srotas :

Udbhava Sthana :

Sanchara Sthana :

Vyakta Sthana :

Adhistana :

Rogamarga

Srotovaigunya - Atipravrutti / Sanga / Vimargagamana / Sira granthi

Vyavacchedaka Nidana (Differential Diagnosis) -

Vyadhi Viniscchaya (Final Diagnosis) –

Chikitsa Sootra (Line of Treatment) -

Chikitsa (Treatment) -

Shodhana : Vamana / Virechana / Vasti /Nasya / Raktamokshana

Shamana :

Sthanika upakrama :

Follow up :

Signature of Teacher **Signature of the Student**

SECTION D

STHANIKA UPAKRAMA

IN SITU TREATMENT RECORD

Name:	OPD No:
Age:	IPD No:
Occupation:	DOA:
Marital status:	DOD:
Religion:	Address :
	Diagnosis:

Name of Upakrama -

Poorva Karma -

Pradhana Karma

Paschat Karma

Upadrava if any / management –

Observation:

Day	Date	Name of sthanika upkrama				Sign of Student	Sign of teacher
1.							
2.							
3.							
4.							
5.							
6.							
7.							
8.							
9.							
10.							

COURSE CURRICULUM FOR THIRD PROFESSIONAL BAMS
(PRESCRIBED BY NCISM)



Kaumarabhritya
(Pediatrics)

(SUBJECT CODE : AyUG-KB)

(Applicable from 2021-22 batch, from the academic year 2024-25 onwards for 5 batches or until further notification by NCISM, whichever is earlier)

ncism

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BOARD OF AYURVEDA
NATIONAL COMMISSION FOR INDIAN SYSTEM OF MEDICINE
NEW DELHI-110026

NCISM

III Professional Ayurvedacharya
(BAMS)
Subject Code : AyUG-KB

Kaumarabhritya
(Pediatrics)

Summary

Total number of Teaching hours: 275			
Lecture (LH) - Theory		**100**	**100(LH)**
Paper I	100		
Non-Lecture (NLHT)		**53**	**175(NLH)**
Paper I	53		
Non-Lecture (NLHP)		**122**	
Paper I	122		

Examination (Papers & Mark Distribution)					
Item	**Theory Component Marks**	**Practical Component Marks**			
		Practical	**Viva**	**Elective**	**IA**
Paper I	100	100	60	10 (Set-TB)	30
Sub-Total	100	200			
Total marks	300				

Important Note :- The User Manual III BAMS is a valuable resource that provides comprehensive details about the curriculum file. It will help you understand and implement the curriculum. Please read the User Manual III before reading this curriculum file. The curriculum file has been thoroughly reviewed and verified for accuracy. However, if you find any discrepancies, please note that the contents related to the MSE should be considered authentic. In case of difficulty and questions regarding curriculum write to **syllabus24ayu@ncismindia.org**

PREFACE

Kaumarabhritya, the branch of Ayurveda dedicated to child health, has been restructured to align with the principles of an outcome-based dynamic curriculum. This revised syllabus ensures that BAMS graduates are well-prepared to address the comprehensive healthcare needs of children, starting from preconception through early childhood and beyond. A key focus of this curriculum is the first 1000 days of life, a crucial period that shapes a child's future health and development. By integrating Ayurvedic wisdom with modern medical knowledge, the syllabus provides a holistic approach to pediatric care, allowing students to understand Ayurveda’s role in preventing and managing childhood diseases while complementing contemporary healthcare practices.

The curriculum emphasizes a systematic and interconnected understanding of the human body, moving beyond a linear approach to highlight the interdependence of different bodily systems. Practical learning is given priority, with hands-on training in Bala Panchakarma procedures, Ayurvedic therapies, and modern pediatric interventions. The course also focuses on research updates, effective communication skills, and building strong relationships with children and caregivers. To ensure successful implementation, a supportive academic environment is emphasized, encouraging continuous learning and collaboration among students and faculty.

At the end of the course, students will be able to assess normal growth and development, identify deviations, and provide Ayurvedic-based preventive and curative solutions. The syllabus also instills a deep understanding of child rights, diversity, and ethical considerations in pediatric healthcare. In alignment with national health policies, this curriculum contributes to building a healthy future generation and serves as a valuable reference for academicians, researchers, and practitioners in Ayurveda and integrative medicine.

INDEX

Course Code and Name of Course 5
Table 1 : Course learning outcomes and mapped PO 5
Table 2 : Contents of Course 6
Paper 1 6
Table 3 : Learning objectives of Course 12
Paper 1 12
Table 4 : NLHT Activity 144
Table 5 : List of Practicals 147
Table 6 : Assessment Summary: Assessment is subdivided in A to H points 151
6 A : Number of Papers and Marks Distribution 151
6 B : Scheme of Assessment (Formative and Summative) 151
6 C : Calculation Method for Internal assessment Marks 151
6 D : Evaluation Methods for Periodical Assessment 152
6 E : Question Paper Pattern 153
6 F : Distribution of theory examination 154
Paper 1 154
6 G : Instructions for UG Paper Setting & Blue print 155
6 H : Distribution of Practical Exam 156
References Books/ Resources 158
Syllabus Committee 161
Abbreviations 166

Course Code and Name of Course

Course code	Name of Course
AyUG-KB	Kaumarabhritya

Table 1 : Course learning outcomes and mapped PO

SR1 CO No	A1 Course learning Outcomes (CO) AyUG-KB At the end of the course AyUG-KB, the students should be able to-	B1 Course learning Outcomes mapped with program learning outcomes.
CO 1	Evaluate normal growth and development and its deviation in children.	PO1,PO2
CO 2	Diagnose and manage Bala Roga (Paediatric diseases) using both Ayurveda principles and contemporary medical science.	PO1,PO2,PO3,PO5,PO9
CO 3	Demonstrate knowledge and skills in assessing and intervening child health through Ayurveda with research updates.	PO2,PO5,PO7,PO9
CO 4	Demonstrate effective communication skills to build a good rapport with child/care taker that encourage participation in the shared decision making for the child health care.	PO3,PO5,PO6
CO 5	Formulate Ayurveda methods of building good health and immunity for a child	PO1,PO2
CO 6	Construct the ability to customize the Ahara and Vihara with respect to Vaya, Ahara Prakarana, Prakruti and Roga Avasta of the child	PO1,PO3,PO7,PO8,PO9
CO 7	Demonstrate the skill of handling the child and perform the Panchakarma in Balaroga.	PO4,PO5,PO9
CO 8	Advocate the child rights, Respect the diversity and abide to the ethical and legal code of conduct in the child health care	PO5,PO6

Table 2 : Contents of Course

Paper 1 (KAUMARABHRITYA)						
Sr. No	**A2 List of Topics**	**B2 Term**	**C2 Marks**	**D2 Lecture hours**	**E2 Non-Lecture hours Theory**	**E2 Non-Lecture hours Practical**
1	**Introduction to Kaumarabhritya** 1. Definitions of Kaumarabhritya, Scope and importance of Kaumarabhritya and terminologies used in Kaumarabhritya. 2. Vayobedha (Classification of age with recent Understanding) along with its rationale.	1	1	2	0	0
2	**Bala Samvardhana (Growth and Development)** 1. Growth, Shareera Vridhikara Bhavas (Factors affecting growth of child). 2. Patterns of growth. 3. Parameters used for assessment of growth in infants, children and adolescents 4. Status of Dhatu in a child with reference to growth assessment. 5. Development, factors influencing the development. 6. Childhood Samskaras 7. Developmental milestones. 8. Developmental assessment. 9. Developmental delay 10. Danta Vijnana	1	7	5	3	13
3	**Navajata Vijnana (Neonatology)** 1. Garbha Vridhi and Vikasa 2. Terminologies used in neonatology. 3. Navajata Shishu Paricharya 4. Pranapratyagamana (Neonatal resuscitation) 5. Definition and management of Term, Pre term, Post term and High Risk Neonate. 6. Examination of newborn and assessment of gestational age. 7. Ayu Pariksha Vidhi [Assessment of Longevity and Standard of Living] 8. Etiology, clinical features and management of Navajata Rogas- Swasavarodha (Respiratory distress), Ulbaka (Meconium aspiration syndrome),	1	11	13	3	12

	Birth Injuries, Upashirshaka, Haemorhagic diseases, Kamala (Jaundice), Hypoglycaemia, Akshepaka (Seizures), Abhishyanda (Neonatal Conjunctivitis).					
4	**Stanya Vijnana (Breast Milk)** 1. Stanyotpatti (physiology of lactation), Stanya Guna, Shuddha Stanya Lakshana (Qualities of normal Breast Milk), Piyusha (Colostrum), Composition and types of breastmilk. 2. Stanyapana (breastfeeding), techniques and contraindications of breastfeeding. 3. Stanya Abhava and Complementary feeding 4. Stanyapanayana 5.Stanya Dusti, Stanya Kshaya and Stanya Vruddi. 6.Stanyadushti Rogas-Ksheeralasaka, Ahiputana and Kumarashosha. 7. Concept and practice of Prashana	1	11	5	5	4
5	**Bala Poshana (Child Nutrition) & Vyadhikshamatva (Immunity)** 1. Importance of Ahara in health and disease, Age-related nutritional needs including micronutrients and vitamins. 2. Nutritional assessment 3. Assess the status of Dhatu and Dhatu Pradoshaja Vikara 4. Nutritional diet in different ages. 5. Methods to improve Vyadhikshamatwa and Bala, Swarnaprashana and Lehana. 6. Universal Immunization Program and National Immunization Schedule. 7. Reproductive Child Health (RCH) program 8. Garbhopakrama, Sutikopakrama, Balaparicharya up to 2 years (Care during the First 1000 days of life).	1		5	5	8
6	**Kuposhana Rogas (Nutritional disorders)** 1. Phakka Roga, Kumarasosha, Karshya, Parigarbhika and Sthaulya. 2. Severe Acute Malnutrition (SAM), Moderate Acute Malnutrition (MAM) and Failure to thrive (FTT) 3. Concept of deficiency diseases with respect to Ahara Guna, Koshta, Agni and other disease conditions.	2	7	6	3	4
7	**Balaroga Pariksha Vidhi & Chikitsa**	2		5	0	16

	Siddhantha (Pediatric Examination and treatment principles) 1. Paediatric Examination and Case-Taking 2. Vedana Parijnana 3. Samanya Chikitsa Siddhanta 4. Oushadha Matra Nirdharana (Posology)					
8	**Kulaja and Sahaja Rogas (Genetic and Congenital Disorders)** 1. Kulaja Vikaras, Muscular Dystrophies (DMD) and Thalassemia. 2. Sahajavikaras, Congenital disorders like Sahaja Hridaya Vikara (Congenital Heart Disease), Khandaushtha (Cleft lip), Khanda Talu (Cleft Palate), Pada Vikruti (Talipes), Sannirudha Guda (Imperforated Anus) and Neural Tube Defects, Down syndrome, Turners syndrome 3. Preconception care for healthy Ritu, Kshetra, Ambu and Beeja.	2	5	5	2	5
9	**Graha Rogas and Aupasargika Rogas (Infectious Diseases)** 1. Graharogas 2. Romantika (Measles), Karnamoola Sotha (Mumps), Rubella, Masurika (Chickenpox), Hand Foot Mouth Disease, Rohini (Diphtheria), Typhoid, Tuberculosis, Pertussis, Dhanurvata (Tetanus), Meningitis, Malaria, Dengue and Hepatitis. 3. Krimiroga (Helminthic infestation).	2	8	7	4	3
10	**Swasana Rogas [Disorders of Respiratory system]** 1. Pratishaya, Kasa and Shwasa(Common Cold, Tonsilitis, Pharyngitis, Talukantaka, Adenoid hypertrophy, Bronchial Asthma, Pneumonia). 2. Knowledge of medicines, procedure-based therapies, Pathyapathya, counseling of the parent and Referral criteria.	2	10	5	4	6
11	**Mahasrota Roga [Gastro Intestinal Disorders]** 1. Examination of Annavaha Srotas 2. Chardi (Vomiting), Atisara, Grahani and Pravahika- (Diarrheal disease), Vibanda (Constipation), Udara Soola (Infantile Colic and Abdominal Pain) and Parikartika (Fissure in ano),	2		6	3	6

	Mukha Paka (Stomaitis). 3. Dehydration and Oral Rehydration Therapies. 4. Knowledge of medicines, Procedure-based therapies, Pathyapathya, counseling of the parent and Referral criteria.					
12	**Rasa Rakta Rogas [Disorders of blood and cardiovascular system]** 1. Examination of Rasavahas Srotas and Raktavaha Srotas 2. Pandu (Anemia), Kamala (Jaundice), Raktapitta (Haemorrhagic disease), Yakrit Udara and Pleehodara (Hepatosplenomegaly) 3. Knowledge of medicines, procedure-based therapies, Pathyapathya, Counseling of the parent and Referral criteria.	2	10	3	3	6
13	**Antahsravee Granthi Rogas (Disorders of Endocrine System)** 1. Sahaja Prameha (Type 1 Diabetes), Thyroid dysfunctions and Precocious and Delayed Puberty. 2. Knowledge of medicines, procedure-based therapies, Pathyapathya, counseling of the parent and Referral criteria.	2		3	2	2
14	**Mutravaha Sroto Rogas (Disorders of Genito urinary system)** 1. Examination of Mutravaha srotas 2. Niruddha Prakasha (Phimosis) 3. Mutra Rogas (UTI, Glomerular Nephritis, Chronic Renal Failure, Nephrotic syndrome, Hematuria, Proteinuria). 4. Knowledge of medicines, procedure-based therapies, Pathyapathya, counseling of the parent and Referral criteria.	3	5	3	2	2
15	**Sandhi Rogas (Rheumatological Disorders)** 1. Amavata, Vatarakta, Sandigata Vata(Rheumatological disorders). 2. Knowledge regarding medicines, Procedure-based therapies, Pathyapathya, counseling of the parent and Referral criteria.	3		3	2	2
16	**Twak Rogas (Dermatological Disorders)** 1. Kushta, Charmadala, Arumshika and Visarpa (Scabies, Eczema, Atopic Dermatitis and	3	13	3	2	3

	Psoriasis). 2. Knowledge of medicines, Procedure-based therapies, Pathyapathya, counseling of the parent and Referral criteria.					
17	**Sira Snayu Rogas (Nervous system disorders)** 1. Examination of the nervous system 2. Jalaseershaka (Hydrocephalus), Apasmara (Epilepsy) Ataxia, Floppiness, Cerebral Palsy. 3. Knowledge of medicines, procedure-based therapies, Pathyapathya, counseling of the parent and Referral criteria.	3		7	3	9
18	**Unmada Rogas (Behavioral and Neurobehavioral disorders)** 1. Bala Unmada (ADHD, ASD, Temper tantrum) 2. Learning Disabilities, Scholastic backwardness, Breath holding spells, Mritbhakshana (Pica), Thumb sucking and Shayyamutra (Enuresis). Buddhi Mandya (Mental retardation). 3. Integrated Child Development Centre. 4. Knowledge of medicines, procedure-based therapies, Pathyapathya, counseling of the parent and Referral criteria.	3		3	4	9
19	**Atyayika Rogas (Emergency Paediatrics)** 1. Paediatric emergencies–Status epilepticus, Febrile seizures, Acute breathlessness, Poisoning, Shock, Burns, Foreign body Aspiration, Insect bite, Cardiorespiratory Arrest. 2. Fluid resuscitation techniques, IV access, Nebulization and PR medications in different conditions.	3	12	3	2	3
20	**Bala Panchakarma** Practice of Panchakarma in children -Rukshana, Snehana, Swedana, Vamana, Virechana, Basti, Nasya, Raktamokshana, Netrakalpa, Nasa, Karna procedures.	3		5	0	8
21	**Kishora Swasthya (Adolescent Health)** 1. Knowledge regarding adolescent health and diseases 2. Sexual Maturity Rating Scale	3		2	0	1
22	**Anya Rogas (Miscellaneous Diseases)**	3		1	1	0

	Inborn Errors of Metabolism, Congenital Rubella Syndrome, Celiac Disease, Spinal Muscular Atrophy, Guillain Barre Syndrome, Sickle Cell Anemia, Wilsons Disease,Kukunaka, Utphullika, Ajagallika and TaluKantaka.					
Total Marks			**100**	**100**	**53**	**122**

Table 3 : Learning objectives of Course

Paper 1 (KAUMARABHRITYA)										
A3 Course outcome	**B3 Learning Objective (At the end of the session, the students should be able to)**	**C3 Domain/sub**	**D3 MK / DK / NK**	**E3 Level**	**F3 T-L method**	**G3 Assessment**	**H3 Assessment Type**	**I3 Term**	**K3 Integration**	**L3 Type**
Topic 1 Introduction to Kaumarabhritya (LH :2 NLHT: 0 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO 1,CO 3	Define Kaumarabhritya	CK	MK	K	DIS,REC,L	INT,PUZ	F&S	I	-	LH
CO 1,CO 3	Enlist the scope and importance of Kaumarabhritya. Explain the term Jatamatra, Navajata, Sadyojata, Bala, and Kumara.	CC	DK	K	L&PPT,DIS	CR-W,S-LAQ,WP	F&S	I	-	LH
CO 1,CO 3	Explain Vayo Bheda. Enlist terminologies associated with different stages of life. Classify age as per recent advances. Analyse rationale behind Vayo Bheda.	CAN	MK	KH	BS,L&GD	INT,CR-W,DEB	F&S	I	-	LH
Non Lecture Hour Theory										
S.No	**Name of Activity**	**Description of Theory Activity**								
Non Lecture Hour Practical										
S.No	**Name of Practical**	**Description of Practical Activity**								
Topic 2 Bala Samvardhana (Growth and Development) (LH :5 NLHT: 3 NLHP: 13)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**

CO 1,CO 3	Define Growth and Describe factors affecting Growth and Development	CK	MK	K	BS,DIS, L&PPT	INT,T-CS	F&S	I	-	LH
CO 1,CO 3	Recognise patterns of Growth during Infancy,Childhood and Adolescence.	CK	MK	KH	BS,L&P PT ,DIS	PA,QZ ,M-MOD	F&S	I	-	LH
CO 1,CO 3	Demonstrate different parameters used for assessment of growth in infants, children and adolescents including WHO standard and Indian Standard Parameters.	PSY-GUD	MK	SH	D,D-BED,PT	SP,P-PRF,CHK	F&S	I	-	NLHP2.1
CO 1,CO 3	Screen and plot normal and abnormal growth in different age groups independently.	PSY-MEC	MK	SH	PT,D,D-BED	CHK,PP-Practical,P-PRF	F&S	I	-	NLHP2.2
CO 1,CO 3	Examine the status of Dhatu in a child with reference to growth assessment.	CAP	MK	SH	D,PT	CHK,P-SUR,PP-Practical	F&S	I	-	NLHP2.3
CO 1,CO 3	Measure Anthropometry, investigate undernourishment and evaluate the nutritional status of child	PSY-MEC	MK	SH	PT,PBL ,D	Mini-CEX,P-PRF	F&S	I	-	NLHP2.4
CO 1	Define Development, enlist normal developmental milestones in - Gross Motor, Fine Motor skills, Personal-Social and general understanding, Language, Vision and Hearing.	CK	MK	K	EDU,L &PPT ,L_VC	O-GAME,PA,M-MOD	F&S	I	-	LH
CO 1,CO 2,CO 3	Define Developmental Delay	CK	MK	K	L_VC,L &PPT	INT	F&S	I	-	LH
CO	Assess Developmental Milestones in normal child & interpret the	CE	MK	SH	PBL,SI	Mini-CEX,	F&S	I	-	NLHP2.5

1,CO 4	observations.				M,PT	CHK,P-CASE				
CO 1,CO 2,CO 4	Assess Developmental Delay in children using DDST -Denver developmental screening test	CE	MK	SH	W,PBL, PT	P-PRF,CHK,P-CASE	F&S	I	-	NLHP2.6
CO 1,CO 2,CO 4	Record a case of Developmental Delay using the skill of history taking and DDST assessment.	PSY-MEC	MK	SH	CD,CBL,SIM	P-CASE,SP,CHK	F&S	I	-	NLHP2.7
CO 1	Describe Danta and enlist types of Danta.	CK	DK	K	DIS,L&GD	M-MOD,WP,INT	F&S	I	-	LH
CO 1,CO 3	Describe primary and secondary Dentition.	CK	MK	K	DIS,L&PPT	M-MOD,PRN,INT	F&S	I	-	LH
CO 1,CO 3	Explain process of Dantotpatti.	CC	DK	K	BL,L&GD	INT,M-CHT,PRN	F&S	I	-	LH
CO 1,CO 2,CO 3	Enlist complications of Dantotpatti and explain its management.	CC	MK	K	RLE,L&GD,PSM	PM,T-CS	F&S	I	-	LH
CO 1,CO 3,CO 5,CO 6	Explain Childhood Samskaras.	CC	NK	K	L&GD,BS,L_VC	INT,WP,O-GAME	F&S	I	-	LH

CO 1,CO 3,CO 5,CO 6	Analyse the role of Samskaras in the process of development.	CAN	DK	KH	DIS,BS, FC	CHK,COM, M-MOD	F&S	I	-	NLHT2.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 2.1	Childhood Samskaras	**Prerequisite\ preparation** **By the Teacher** - The teacher provides resource material (PPT/Video/Research articles) one week prior to the activity. **By the Student** - Students are expected to go through the resource materials prior to the activity. **Class Activity: Group discussion- 1 hour** 1. Students are divided in groups (min 5 and max 10 students/group). 2. Each group is assigned 1 or 2 Childhood Samskara based on class strength and number of groups. 3. Students are given time for group discussion Key points of discussion - Role of Samskara in the process of development. Example – Analyse how Nishkramana Samskara helps child to adjust with the external environment and what are development milestones the child must achieve by that age. **Class Activity: Presentation and evaluation - 2 hours** 1. Group leader present their inputs to the class. 2. Other groups are expected to add to the discussion. 3. Record and submit the summary of the discussion. **Role of Teacher during Activity** 1. Facilitate group discussion. 2. Assess teamwork and presentation through the checklist. **Checklist: Yes/No** 1. Pre-preparedness of the subject 2. Accurately identifies the milestone during the samskara 3. Analyse the role of samskara in child development with example 4. Justifies the query raised

		5. Active collaboration
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 2.1	Assessment of Growth I	**Duration:** 3 hours **Pre-preparation** **By the Teacher:** Arranging the equipment necessary for assessment of growth. **By the Students:** Student is expected to come prepared with the concept of growth and its assessment. **Clinical Classroom:** 1. Students are briefed about the parameters used for the assessment of growth including anthropometry (weight, height, head circumference, chest circumference, MAC other relevant parameters) 2. Demonstration of measurement on Patient/Student by the teacher. **Bedside:** 1. Students are divided into groups (min 5 to max 10) and sent to OPD/IPD 2. Each group is assigned 1 or 2 patients. 3. Students are instructed to take proper anthropometry of the given child by using fibre glass measuring tape, stadiometer, weighing machine and other equipment. Use appropriate growth formulae for assessing growth. **Clinical Classroom** 1. Discussion: Check for Growth deviations if any, age-specific growth, Indian and WHO standard. 2. Students present their observations and record. **Evaluation:** Teacher evaluates student performance using a checklist. **Checklist:** Yes/No 1. Pre-preparedness of the subject 2. Check for Zero level of scale 3. Handles baby/child gently 4. Remove parallax while taking the reading 5. Record the measurement accurately

		6. Compare with formulas and standard chart
NLHP 2.2	Assessment of Growth II	**Duration:** 1 hour **Pre-Preparation:** **By the Teacher:** Measurement Instruments are to be arranged prior to the activity. **By the Student:** Students are expected to come prepared with the knowledge of Growth and its assessment. **Activity** **Clinical classroom:** 1. Students are initially briefed on the factors affecting the growth, and anthropometric measurements according to the different age classification and their variations. 2. Students are sent to OPD/IPD. **Bedside** 1. Students are instructed to take proper anthropometric measurements of the given child to screen for normal and abnormal growth independently. 2. Use appropriate growth formulas (WHO & Indian standard parameters) to differentiate normal and abnormal growth. 3. Take a brief history of the child. 4. Plot normal & abnormal growth according to different age groups. **Clinical Classroom** Students present their findings and variations found and discuss the factors that affected the growth. **Evaluation:** Students are evaluated using the checklist/observation. **Checklist:** Yes/No 1. Record the measurements accurately 2. Plot the measurement on the growth chart 3. Interpret the graph 4. List the possible factors affecting growth
NLHP 2.3	Status of Dhatu	**Duration:** 1 hour **Pre-Preparation**

		By the Teacher: Group division and arranging the Case for discussion. **By the Student:** The student is expected to come prepared with the knowledge of Dhatu Sara Lakshana, Dhatu Vriddhi Lakshana and Dhatu Kshaya Lakshana. **Clinical Classroom:** 1. Students are briefed with Dhatu Sara Lakshana, Vriddhi and Kshaya Lakshanas 2. Students are grouped into batches(min 4 to max 8)and sent to OPD/IPD **Bedside:** 1. Students are instructed to examine the assigned child for proper Rasa, Rakta, Mamsa and other Dhatu Sara Lakshana, Vriddhi and Kshaya Lakshanas. Record the observations. **Clinical Classroom:**Each group will discuss their assessment. **Evaluation:** Teacher assesses students' performance using a checklist. **Checklist:** Yes/No 1. Rapport building with the child and caretaker 2. Demographic data recorded 3. Ask appropriate questions to assess the status 5. Assess Dhatu Sara, Vruddi and Kashya Lakshana precisely 6. Presents their finding confidently
NLHP 2.4	Undernourished child	**Duration:** 1 hour **Pre-Preparation** **By the Teacher:** 1. Group division and arranging real case/case vignettes. 2. Arranging necessary equipment for measurements. **By the Students:** Student is expected to come prepared with the knowledge of anthropometry, growth chart, nutritional assessment and the features of micro-nutrient and vitamin deficiencies. **Activity** **Clinical classroom:** Students are divided in groups and sent to OPD/IPD **Bedside** 1. Rapport building 2. Record anthropometric measurements and plot on the graph.

		3. Examine the features of micro-nutrients and vitamin deficiencies. **Clinical classroom** 1. Discuss the anthropometric measurements of the given case 2. Evaluate the nutritional status of the child 3. Make a judgment on the nutritional status of the child. **Role of Teacher**: Observe the communication skills during Case Taking, provide inputs on the case and Assess student performance through a checklist.
NLHP 2.5	Assessment of Developmental Milestones in normal child	**Duration** : 3 hours **Pre-preparation** **By the Teacher:** 1. Arranging the materials or objects necessary for assessment of development. 2. Arranging Real Patient/Videos **By the Students**: Student is expected to come prepared with developmental milestones before the session. **Clinical Classroom:** Students are briefed about the parameters used for the assessment of development. **Bedside (In real case)** 1. Students are divided in groups (8-12 in one group). 2. Students are sent to OPD/IPD 3. Students should assess the developmental milestones of a given child. **Clinical Classroom** Students present and record their observations. **Role of Teacher:** The teacher evaluates student performance using a checklist. **Checklist**: Yes/No 1. Pre-preparedness of the topic. 2. Rapport building established. 3. Handle the baby/child gently. 4. Ask relevant questions to find the age of achievement of milestones. 5. Interpret the development as per age accurately.

NLHP 2.6	Assessment of Developmental Delay	**Duration:** 2 hours **Pre-preparation** **By the Teacher:** 1. Arranging the materials or objects necessary for assessment of development. 2. Arranging Real Patient/Videos **By the Students**: Student is expected to come prepared with developmental milestones and DDST scale before the session. **Clinical Classroom:** Students are briefed about DDST Scale in the classroom. **Bedside** (In real case) 1. Students are divided in groups (8-12 in one group). 2. Students are sent to OPD/IPD 3. Students should assess the developmental milestones of a given child using DDST Scale. **Clinical Classroom** Students present and record the observations. **Role of Teacher:** Teacher evaluates student performance using a checklist. **Checklist:** Yes/No 1. Rapport building established 2. Handle the baby/child gently 3. Use DDST scale to assess the developmental milestone accurately 4. Interpret the development as per age accurately
NLHP 2.7	Case of Developmental Delay	**Duration:** 2 hours **Pre-Preparation -** **By the Teacher:** Group division and arranging the Case for discussion **By the Student:** The student is expected to come prepared with the knowledge of Developmental milestones, Developmental delay and history taking. **Bedside activity:** 1. Students are divided in groups (Min 4 max 8) and sent to OPD/IPD 2. Each group is assigned a developmental delay case. (Real case/Simulated case/Clinical case video)

		3. Students are expected to - A. Build Rapport with the patient and guardian. History taking (More importance to be given on developmental milestones like when baby achieves social smile, neck control, and other developmental milestones which include gross motor, fine motor, social and language development). B. Assess the child using DDST scale. C. Record the case **Clinical Classroom:** Present the case and discuss the observation. **Role of Teacher:** Observe the communication skills during Case Taking, provide inputs on the case and Assess student performance through a checklist. **Checklist:** Yes/No 1. Pre-preparedness of the topic 2. Rapport building established 3. Demographic data and family history documented 4. Developmental milestones assessed using DDST scale 5. History of developmental delay explained. 6. Analyse the probable cause for developmental delay based on history.

Topic 3 Navajata Vijnana (Neonatology) (LH :13 NLHT: 3 NLHP: 12)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO 1	Explain Garbha Vriddhi and Vikasa. Explain fetal development.	CC	NK	K	L_VC,L &PPT	QZ ,M-CHT,O-GAME	F&S	I	H-SP	LH
CO 1,CO 2,CO 3	Define the terms - SGA, LGA, AGA, LBW, VLBW, ELBW, Fetus, Live birth and Stillbirth. Describe the characteristics of Normal Term Neonate. Describe the characteristics of High-Risk Neonate. Recite Swasta Bala Lakshana.	CK	MK	K	DIS,L&PPT ,REC	O-GAME,INT,WP	F&S	I	-	LH
CO 2,CO 3	Explain Navajata Shishu Paricharya including Pranapratyagamana. Explain recent advances in neonatal care.	CC	MK	K	L_VC,L &PPT	S-LAQ,M-CHT,INT	F&S	I	-	LH

CO 2,CO 3	Explain Nabhi Nala Chedana. Enlist and explain complications of Nabhi Nala Chedana, Nabhi Paka, Umbilical sepsis and its management. Explain the management of Umbilical Hernia	CC	MK	K	L&GD, L_VC,DIS	C-VC,T-CS	F&S	I	-	LH
CO 3,CO 7,CO 8	Analyse the scientificity of Navajata Shishu Paricharya & Pranapratyagamana with respect to: Receiving the baby, Temperature maintenance, Stimulation of breathing and Cord care	CAN	MK	KH	BS,FC,IBL	PRN,CHK, DEB	F&S	I	-	NLHT3.1
CO 1,CO 2,CO 3	Explain the care of Post term and Preterm Neonates.	CC	MK	K	L&PPT ,L_VC, CD	QZ ,T-CS, C-VC	F&S	I	-	LH
CO 2,CO 3	Explain Neonatal Resuscitation. Enlist complications of Neonatal Resuscitation and Explain management. Recognise the Preventive Strategies at the time of delivery.	CC	MK	KH	D-M,BS ,L&PPT	CL-PR,INT ,O-GAME	F&S	I	-	LH
CO 3,CO 7,CO 8	Perform Neonatal Resuscitation on manikin. Demonstrate Intranatal care and receiving a baby in normal delivery.	PSY-GUD	MK	SH	D-M,W,PT	CHK,DOPS,OSCE,DOPS	F&S	I	-	NLHP3.1
CO 1,CO 7	Examine Newborn baby and assess gestational age of Newborn.	PSY-GUD	MK	SH	D-M,W,PT	CHK,OSCE,P-PRF	F&S	I	-	NLHP3.2
CO 3,CO 4,CO 7	Demonstrate Navajata Abhyanga, Snana and administer Prashanam. Counsel and educate the caretakers regarding "Newborn Care after discharge"	PSY-GUD	MK	SH	D-M,RP	CHK,PA,RS	F&S	I	-	NLHP3.3
CO 3,CO	Explain Rakshakarma Vidhi. Analyse scientificity of Raksha Karma.	CAN	MK	KH	SDL,L&GD	CL-PR,DEB,PUZ	F&S	I	-	LH

5										
CO 1,CO 3	Infer Ayu Pariksha Vidhi [Assessment of Longevity and Standard of Living]	CAN	NK	KH	W,EDU ,PL	RS,CHK,P-SUR	F&S	I	-	NLHT3.2
CO 2,CO 3	Describe the etiology, clinical features and management of neonatal respiratory distress. Describe the etiology, clinical features and management of meconium aspiration syndrome. Explain Ulbakam and its Chikitsa.	CC	MK	K	L&PPT ,LRI,X-Ray	T-CS, C-VC,INT	F&S	I	-	LH
CO 2,CO 3	Enlist and analyze complications of Akalapravahana. Define and enumerate birth injuries and analyze their causes. Describe the clinical features, pathophysiology and management of Caput succedaneum and cephalohematoma. Explain Upasheershakam and its Chikitsa. Describe the clinical features, pathophysiology and management of Erb's Palsy.	CAN	MK	KH	L&PPT ,DIS,C D	C-VC,PUZ ,T-CS	F&S	I	-	LH
CO 2,CO 3	Describe etiology, clinical features and management of haemorrhagic diseases.	CK	MK	K	CD,DIS ,L&PPT	PM,CBA,T-CS	F&S	I	-	LH
CO 2,CO 3	Diagnose Neonatal seizures. Analyse the concept of Akshepaka and Skandapasmara in the context of neonatal seizures	CE	MK	KH	SIM,CB L,PT	SBA,Mini-CEX,CHK	F&S	I	-	NLHP3.4
CO 2,CO 3	Describe etiology, clinical features and management of Neonatal hypothermia, Neonatal hypoglycemia and neonatal seizures.	CK	MK	K	L_VC,C D,L&PP T	CBA,T-CS	F&S	I	-	LH
CO 2,CO	Diagnose Neonatal Hypothermia, Hypoglycemia, Septicemia, Conjunctivitis, Respiratory Distress, Meconium Aspiration	PSY-GUD	MK	SH	CBL,C D,PT	CHK,Mini-CEX,P-	F&S	I	-	NLHP3.5

3	Syndrome, Caput Succedaneum, Cephalohematoma, Erbs palsy, Hemorrhagic diseases. Diagnose Umbilical Hernia and sepsis. Observe the umbilical area of neonates and screen for umbilical sepsis/hernia. Recognize red flags for referrals of umbilical sepsis.					CASE				
CO 2,CO 3	Describe etiology, clinical features and management of neonatal septicemia and neonatal conjunctivitis.	CC	MK	K	CD,L& PPT	T-CS,O-GAME	F&S	I	-	LH
CO 2,CO 3	Explain mechanism of Neonatal jaundice. Describe etiology, clinical features and management of Neonatal Jaundice.	CC	MK	K	L_VC,L &PPT ,LRI	M-CHT, C-VC	F&S	I	-	LH
CO 2,CO 3	Diagnose and manage the case of Neonatal Jaundice.	PSY-GUD	MK	SH	PT,LRI, CBL	CHK,Mini-CEX,P-CASE	F&S	I	-	NLHP3.6
CO 3,CO 5,CO 6	Outline the scope of complimentary approach of Ayurveda principles and practices in the management and prevention of hypothermia, hypoglycemia, seizure, septicemia, conjunctivitis and jaundice in neonate.	CAN	NK	KH	TBL,FC ,BS	CHK,DEB, CL-PR	F&S	I	-	NLHT3.3

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 3.1	Navajata Shishu Paricharya and Pranapratyagamana	**Duration:** 1 hour **Pre-Preparation:** **By the teacher:** Scheduling the topic of discussion, dividing the students in groups (Min 15 Max 20) one week before the session. **By the Student:** 1. Identify a question (Which Procedures of Navajata Shishu Paricharya and Pranapratyagamana have a role or impact in receiving the baby, temperature maintenance, stimulation of breathing and cord care.)

		2. Conduct background research (Explore or study the topics such as Ashmanosanghatanokarnayormulam , Sheetodakenaushnodakena Mukha Parisheka, and initial steps involved in the labour room) 3. Formulate hypothesis if necessary: Predict how specific Paricharya helps in stimulation of breathing, maintenance of temperature and card care. 4. Plan and conduct investigations (interview with senior Ayurveda pediatricians or collecting research articles) 5. Analyse Data: Gather and analyse information. **Class activity:** 1. Group discussion on collected findings - 10 mins 2. Communicate findings: one group leader presents the findings through a report/presentation. 3. Open discussion/ debate on the findings of each group. 4. Submit the report.
NLHT 3.2	Ayu Pariksha Vidhi	**Duration:** 1 hour **Pre-Preparation** **By the Teacher:** 1. Prepare a questionnaire of each organ character. 2. Group division (5-8 in one group) **By the Student:** Student is expected to come prepared with the knowledge of Lakshana Adhyaya **Activity:** 1. Teacher briefs about Ayupariksha Vidhi and the questionnaire prepared 2. Examine peers/children 2. Mark each character based on its presence 3. Cross-check with their current health status/professional status etc as interpretation 4. Discuss based on opportunities received, lifestyle adapted etc 5. Discuss on the feasibility of Lakshan Adhyaya. **Role of a teacher:** 1. Guide students on interpreting the questionnaire 2. Evaluation: The teacher evaluates students using the Checklist form and gives feedback. **Checklist:** Yes/No

		1. Correctly identify the features 2. Interprets the inference 3. Active participation
NLHT 3.3	Neonatal disorders	**Duration :** 1 hour **Prerequisite\ preparation -** **By the Teacher:** 1. Dividing the class into six groups and assigning one condition to each group (hypothermia, hypoglycemia, seizure, septicemia, conjunctivitis and jaundice) one-two weeks prior to the session. 2. Guiding the student to collect references and document the findings **By the Student:** Student is expected to collect references, document and present their opinion. **Class Activity** 1.Students gather in assigned groups and discuss: 10 mins 2. One from each group is expected to present the Ayurveda principles and practices in the management and prevention of allotted disease with their peers. (For example : Stanyapana (Exclusive breastfeeding) in the management and prevention of neonatal hypoglycemia, Triphala Kwatha Parisheka in neonatal conjunctivitis) 3. Debate and Discuss the presented findings. **Role of a teacher:** 1.Facilitate group discussion 2.Evaluation is done using a checklist and inputs are provided based on their performance. **Checklist:** Yes/No 1. Pre-preparedness on the topic 2. Correctly identify the preventive and complementary strategies 3. Justifies the strategies with evidence 4. Good collaboration 5.Presents the finding logically
Non Lecture Hour Practical		

S.No	Name of Practical	Description of Practical Activity
NLHP 3.1	Neonatal Resuscitation and Intranatal care.	**Duration:** 3 hours **Pre-Preparation** **By the Teacher:** Arranging the Manikins, instruments and equipment necessary for Neonatal resuscitation. **By the Student:** Student is expected to come prepared with the knowledge of Neonatal resuscitation. **Activity in clinical classroom/simulation lab:** 1. Teacher enlists the aseptic measures and Neonatal resuscitation and 2. Demonstration of neonatal resuscitation and intranatal care by the trainer. 3. Demonstration of communication skills with the mother during birth by the trainer. 4. Students are divided in groups.(6-10 in each group) 5. Each group is provided with manikin. 6. Students are instructed to perform neonatal resuscitation in turns. **Role of a teacher:** 1. Guide students on appropriate methods of performing neonatal resuscitation. 2. Teacher evaluates students using the Checklist/DOAP form. **Checklist:** Yes/No 1. Handling the manikin gently 2. Follow the proper steps of resuscitation 3. Quick decision taken during change of procedures 4. Performs the steps efficiently and skillfully.
NLHP 3.2	Examination of Newborn and Assessment of gestational age.	**Duration:** 2 hours **Pre-Preparation** **By the Teacher:** Arranging the Manikin/Real case and instruments and equipment necessary for Neonatal examination. **By the Student:** Student is expected to come prepared with the knowledge of the Neonatal examination **Activity in clinical classroom/simulation lab:** 1. Students are divided in groups.(6-10 in each group)

		2. Each group is provided with a manikin/real case. 3. Teacher demonstrates the newborn examination on a manikin/real case. 4. Students perform the following examination on a manikin/real case. a. Examination immediately after birth b. Examination on the second day of life c. Examination on the day of discharge **Role of a teacher:** 1. Guide students on appropriate methods of performing neonatal examination. 2. Teacher evaluates students using the Checklist form. **Checklist:** Yes/No 1. Establish rapport with parent/caretaker 2. Handle the baby/manikin gently 3. Performs the examination efficiently 4. Identifies the gestation maturity based on the physical and neurological maturity of the child.
NLHP 3.3	Newborn care after discharge	**Duration:** 2 hours **Pre-Preparation** **By the Teacher:** 1. Arranging the Manikin and instruments necessary for demonstrating Navajata abhyanga, Snana and administering Prashanam. 2. Preparing a Role Play skit/pre-recorded video of the demonstration By the Student: Student is expected to come prepared with the knowledge of Abhyanga, Snana and Prashanam. **Activity in clinical classroom/simulation lab:** 1. Teacher demonstrates the Newborn care post discharge including Abhyanga, Snana and Prashanam on Manikin or real baby/displays the pre-recorded video. 2. Students gather in groups to practice on Manikin and with peers. Components of role-play demonstration include: 1. Building a Rapport with the mother and ensuring her on Newborn Care. 2. Explaining the signs of a healthy baby and a sick baby. 3. Demonstrating the breastfeeding position and burping. Explaining the frequency

		4. Demonstrating Abhyanga and Snana 5. Demonstrating Prashanam. 6. Explaining cleaning and clothing of the baby 7. Demonstrating Cord care 8. Demonstrating Shiro Pichu 9. Ensuring if the mother has understood the communication and has no doubts. **Role of a teacher:** 1. Demonstration of Role play and guide students on right practice. 2. Teacher evaluates the student skill by using Check list and gives feedback. **Checklist:** Yes/No 1. Rapport building established 2. Explains signs of healthy baby and sick baby efficiently. 3. Demonstrates the breastfeeding position and burping 4. Demonstrates Abhyanga, Snana and Prashanam. 5. Explains the cleaning and clothing of the baby. 6. Demonstrates Cord care and Shiro Pichu. 7. Ensures that the mother has understood the communication.
NLHP 3.4	Neonatal seizures /Akshepaka and Skandapasmara.	**Duration:** 1 Hour **Preparation /pre-requisites** **By the teacher:** 1. Scheduling the case taking and arranging the case (Real Patient / simulated patient/ Case Vignette) 2. Make the student understand the OPD/IPD manners during case-taking 3. Preparing the checklist for the concerned activity. **By the student:** 1. Student is expected to come prepared with the content of Nidana Panchaka and Chikitsa Apasmara, the concept of Akshepaka and Skandapasmara and neonatal seizure. 2. Rapport building, proper history taking, thorough examination, appropriate Investigation **ACTIVITY** **In clinical classroom**: Students are divided in groups (5-8 members in one group) and assigned one case (Real/Simulated/Case Vignette)

		Bedside: Case taking as per the format (in case of real patients) 1. Building rapport with patient 2. History taking 3. Clinical examination **In clinical classroom:** 1. Students discuss the Nidana Panchaka in the allotted group, differential diagnosis, plan investigations if needed & identify the Samprapti Ghatakas 2. Plan the management and justify the Samprapti Vighatana 3. Analyse the Symptoms with the Lakshana of Akshepaka and Skandapasmara 4. Presentation of the case [Each group will present entire case or any sub-point of the case] 5. Recording the case in the record book. **Teacher's role:** Teacher evaluates students' performance based on a checklist/rating scale. **Checklist:** Yes/No 1. Rapport building established 2. Explain the history and symptoms in sequence 3. Plans the management and justifies 4. Analyze the Symptoms with Akshepaka and Skandapasmara 5. Good collaboration
NLHP 3.5	Neonatal diseases	**Duration:** 3 Hours **Preparation /pre-requisites** **By the teacher:** 1. Scheduling the case taking and arranging the case (Real Patient / simulated patient/ Case Vignette) 2. Make the student understand the OPD/IPD manners during case-taking 3. Preparing the checklist for the concerned activity. **By the student:** 1. The student is expected to come prepared with the concept of Neonatal Diseases 2. Rapport building, proper history taking, thorough examination, appropriate Investigation **ACTIVITY** **In clinical classroom:** Students are paired and assigned one case (Real/Simulated/Case Vignette) of Neonatal Hypothermia, Hypoglycemia, Septicemia, Conjunctivitis, Respiratory distress, Meconium

		aspiration syndrome, Caput Succedaneum, Cephalohematoma, Erbs palsy, Hemorrhagic diseases, Umbilical Hernia and Umbilical sepsis. **Bedside:** Case taking as per the format (in case of real patients) – 1 hour 1. Building rapport with patient 2. History taking 3. Clinical examination **In clinical classroom**: 2 hour 1. Students discuss the diagnosis, interpret the investigation report 2. Identify red flag signs for referral 3. Plan the management and justify 4. Presentation of the case [Each group will present the case assigned to them] 5. Recording the case in the record book. **Teacher's role:** The teacher evaluates students' performance based on a checklist/rating scale. **Checklist:** Yes/No 1. Rapport building established in real case 2. Explain the birth history and symptoms in sequence 3. Interpret the investigation report accurately 4. Diagnose the case and justifies the differential diagnosis 5. Plan the possible management 6. Good collaboration
NLHP 3.6	Case of Neonatal Jaundice.	**Duration:** 1 Hour **Preparation /pre-requisites** **By the teacher:** 1. Scheduling the case taking and arranging the case (Real Patient / simulated patient/ Case Vignette) 2. Make the student understand the OPD/IPD manners during case-taking 3. Preparing the checklist for the concerned activity. **By the student:** 1. The student is expected to come prepared with the concept of Neonatal Jaundice 2. Rapport building, proper history taking, thorough examination, appropriate Investigation

		ACTIVITY **In clinical classroom:** Students are divided in groups (5-8 members in one group) and assigned one case (Real/Simulated/Case Vignette) of varying severity of Neonatal Jaundice (Physiological/Pathological) **Bedside:** Case taking as per the format (in case of real patients) 1. Building rapport with patient 2. History taking 3. Clinical examination **In clinical classroom:** 1. Students discuss the diagnosis, interpret the investigation 2. Plan the management and justify 3. Discuss the practical challenges in the management plan and alternatives 4. Presentation of the case [Each group will present the entire case or any sub-point of the case] 5. Recording the case in the record book.

Topic 4 Stanya Vijnana (Breast Milk) (LH :5 NLHT: 5 NLHP: 4)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO 3,CO 5,CO 6	Define Stanya. Explain the process of Stanyotpatti and the physiology of lactation. Enlist Stanya Guna and Shuddha Stanya Lakshana. Enumerate properties of normal breast milk. Define colostrum and enlist the advantages.	CC	MK	K	DIS,L& PPT ,GBL	M-CHT,W P,O-GAME	F&S	I	-	LH
CO 3,CO 5,CO 6	Explain the Advantages of Breastfeeding. Recognize the wrong practices of Breastfeeding. Identify Complementary feeding arrangements in the absence of Stanya. Identify Complementary feeding arrangements in the absence of Breastmilk. Explain Stanyapanayana.	CC	MK	K	TUT,L_ VC,DIS	WP,M-CH T,O-GAME	F&S	I	-	LH
CO 4,CO 7,CO	Demonstrate techniques of breastfeeding.	AFT-RES	MK	SH	RP,SIM ,D	CHK,M-POS,P-RP	F&S	I	-	NLHP4.1

8										
CO 5,CO 6	Identify Complementary feeding arrangements in the absence of Stanya.	CC	DK	KH	FC,DIS, TBL	PRN,CHK, DEB	F&S	I	-	NLHT4.1
CO 5,CO 6	Discuss Complementary feeding arrangements in absence of Breastmilk	CK	MK	K	FC,TBL ,DIS	PUZ,CHK, M-CHT	F&S	I	-	NLHT4.2
CO 5,CO 6	Discuss the Complementary feeding arrangements in the absence of breast milk	CAN	MK	KH	FV,TP W	CR-W,COM	F&S	I	-	NLHP4.2
CO 1,CO 2,CO 3	Explain Nidana, Bheda, Lakshana and Chikitsa of Stanya Dushti. Explain Nidana, Lakshana of Stanya Vriddhi and Kshaya. Recite Stanya Vardhaka Gana and Stanya Shodhana Gana.	CC	MK	K	REC,L &GD,T UT	QZ ,WP,T-CS	F&S	I	-	LH
CO 1,CO 3,CO 4,CO 8	Analyse Nidana, Lakshana of Stanya Vriddhi and Kshaya. Perform Stanya Pareeksha.	PSY-GUD	MK	SH	DL,W, KL	CHK,P-SU R,DOPS,D OPS	F&S	I	-	NLHP4.3
CO 2,CO 3,CO 6	Enlist the Diseases due to Stanyadushti. Explain Nidana, Samprapti, Lakshana and Chikitsa of Ksheeralasaka. Explain Nidana, Samprapti, Lakshana and Chikitsa of Ahiputana/GudaKutta.	CC	MK	K	DIS,L& PPT ,CD	T-CS, C-VC,SBA	F&S	I	-	LH
CO 2,CO 3,CO 5,CO	Explain Nidana, Samprapti, Lakshana and Chikitsa of Kumarashosha. Describe etiopathogenesis, features, investigations and management of Lactose Intolerance. Explain method and practices of Swarnaprashana.	CC	MK	K	DIS,CD ,L&PPT	T-CS,S-LAQ,CBA	F&S	I	-	LH

6										
CO 3,CO 5	Analyse the scientific benifits of Swarnaprashana.	CAN	DK	KH	BS,IBL, DIS	DEB,CHK, CR-RED,CL-PR	F&S	I	-	NLHT4.3
CO 5,CO 7	Prepare and Administer Swarnaprashana	PSY-GUD	MK	SH	PT,D	P-PRF,DOPS,Log book,DOPS	F&S	I	-	NLHP4.4
CO 4,CO 5,CO 8	Participate in breast feeding week celebration.	AFT-RES	NK	SH	TPW,RLE	INT,C-INT	F	I	-	NLHT4.4
CO 2,CO 3	Analyse Ksheeralasaka with Malnutrition and Chronic GI diseases in Breastfeeding babies.	CAN	MK	KH	PBL,FC	CHK,RS,CL-PR	F&S	I	-	NLHT4.5

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 4.1	Complementary feeding I (in the absence of Stanya)	**Duration:** 1 hour **Pre-preparation** **By the Teacher:** 1. Students are divided in groups (8-12 students in one group) 2. The teacher assigns the topic of discussion and the list of references one week before the class activity. **By the Student**: Students are expected to study the concept and come prepared for discussion. Key points of discussion: Stanya Abhave kim Dheyam (complementary or alternative feeding arrangements) **Class Activity :** 1. Students gather in divided groups.

		2. Facilitator open the discussion. 3. Students are expected to discuss Complementary feeding arrangements in absence of Stanya in their respective groups with their peers. 4. Each group will identify a complementary feeding arrangement. 5. Students are supposed to justify the answers with references. 6. One group leader presents the key points of discussion.
NLHT 4.2	Complementary feeding II (in the absence of Breastmilk)	**Duration**: 1 hour **Pre-preparation** **By the Teacher:** 1. Students are divided in groups (8-12 students in one group) 2. The teacher gives the topic of discussion and the list of references one week before the class activity. **By the Student:** Students are expected to study the concept and come prepared for discussion. Key points of discussion: complementary or alternative feeding arrangements **Class Activity :** 1. Students gather in divided groups. 2. Facilitator open the discussion. 3. Students are expected to discuss Complementary feeding arrangements in absence of breastmilk in their respective groups with their peers. 4. Each group will identify complementary feeding arrangement. 5. Students are supposed to justify the answers with references. 6. One group leader presents the key points of discussion.
NLHT 4.3	Swarnaprashana	**Duration:** 1 hour **Pre-preparation** **By the Teacher:** Teacher informs the topic and group division (Min 10 to 12) 1 week before the class activity. **By the Student:** 1. Identify a Question on the topic.

		2. Conduct Background Research: Literature research, Collecting articles/research work on Swarnaprashana 3. Formulate a hypothesis if needed 4. Plan and Conduct Investigations: Interviewing healthcare professionals about Swarnaprashana they use in their practice and thier benifits. Surveys can also be planned in public. 5. Analyse Data: Analyse data from surveys or interviews to understand the scientific benefits of Swarnaprashana. **Class activity:** 1. Students gather in their respective groups 2. Group discussion: 10 mins 3. Communicate findings: Present findings through a report/presentation with evidence. **Role of a Teacher:** 1. Direct the research and facilitate group discussion 2. Evaluate students' performance based on checklist/rating scale **Checklist:** Yes/No 1. Preparation: evidence of prior study and research 2. Participation: All group members actively contribute to the discussion 3. Justification: The scientific benefits of Swarnaprashana are justified with appropriate evidence and answers the query with justification. 4. Communication: clear and confident expression during the discussion and presentation 5. Presentation: Presentation well-organized, relevant, and delivered effectively
NLHT 4.4	Breast feeding week program.	Students are expected to attend Breastfeeding Week program celebration either online or offline mode. The main aim of the program is to educate, encourage breastfeeding and promote good health in children. **Objectives of attending the program.** 1. Learning about breastfeeding benefits for mother. 2. Learning about breastfeeding benefits for children. 3. Importance of breastfeeding. 4. Educating families regarding breastfeeding. **Outcome:** Students are able to encourage and educate the importance of breastfeeding to public.

NLHT 4.5	Ksheeralasaka	**Duration:** 1 hour **Pre-preparation** **By the Teacher:** Teacher divides the group and assigns one problem/Case Vignette to each group one week before the acivity. **By the Student:** Student is expected to understand the problem and study various resources available and prepare for group discussion. **Class activity:** Introduction: Teacher introduces students to the problem or case to be solved and provides an overview of Ksheeralasaka, malnutrition and chronic GI diseases. 1. Students gather in divided groups (8-12 in one group). 2. Students should analyze the symptoms of malnutrition and chronic GI diseases in a given case vignette with Ksheeralasaka by considering its Nidana, Samprapti and Lakshanas in groups. 3. The group leader presents their opinion or observations to the class.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 4.1	Breastfeeding techniques	**Duration:** 1 Hour **Pre-preparation** **By the Teacher:** 1. Dividing the groups and arranging the manikin. 2. Sharing the PPT/Prerecorded video 3. Guiding the students to build a script and validate it before the session. **By the Student:** 1. The student is expected to study breastfeeding techniques before the session. 2. Build a script for role play (Explaining the breastfeeding technique to the parent/caretaker with Do’s and Don’ts) **Activity:** 1. Introduction: The teacher introduces students to different techniques of breastfeeding and its importance on a child's health.

		2. Students assemble in groups and role-play the script. **Role of Teacher:** Facilitate group discussion, feedback & evaluation. Students performance will be evaluated using a checklist. **Checklist:** Yes/No 1. Self-introduction and rapport building 2. Demonstrates the different techniques of breastfeeding efficiently. 3. Demonstrates burping 4. Explains the frequency and duration of Breastfeeding 5. Clear explanation in simple and local language 6. Feedback of communication (Made sure that parents understood the technique)
NLHP 4.2	Complementary feeding Survey	**Duration:** 1 hour **Pre-Preparation:** **By the Teacher:** 1. Teacher has to identify the place of the survey visit and make necessary arrangements. 2. Divide the students in groups **By the Student:** 1. Students has to come prepared with the complementary feedings used in the absence of breastmilk. **Activity** 1. Students should visit nearby pharmacy/dispensary to identify the present complementary food available according to age groups. 2. Compare the composition of different companies and different age groups. 3. Analyse the difference in combinations of different companies. 4. Submit a report of the findings and its reflection. **Role of a teacher:** Teacher evaluates student based on the survey report and team performance.
NLHP 4.3	Stanya Vriddhi, Stanya Kshaya and Stanya Pareeksha	**Duration:** 1 Hour **Activity 1:** To perform Stanya Pareeksha (30Mins) **Pre-Preparation :** **By the Teacher:**

		1. Equipment needed for Stanya Pareeksha to be arranged 2. Sample of Stanya to be arranged **By the Students:**Students are expected to study in detail about Stanya and its examination before coming to the session. **Activity :** 1. Teacher will brief about Stanya Pareeksha in the beginning of class. 2. Students are divided in groups.(5-8 students in each group) 3. Each group is sent to IPD /OPD/lab for sample collection 4. Students are expected to perform examination of stanya by putting a drop of Stanya in to water and note the findings. 5. New methods of Stanya Pareeksha can be practiced if available. **Activity 2:** Survey (30 mins) **Pre-Preparation:** **By the Teacher:** Provide references and guide students on building a questionnaire/online form for assessment. **By the Student:** Students are expected to understand the Stanya Vriddhi and Kshaya Lakshanas and prepare a questionnaire (For both offline and online assessment) **Activity** 1. Student conduct survey offline (OPD/IPD) or online (feeding mothers) 2. Submit the report of the survey and analyze the results in the group 3. Students are expected to analyze the cause for Stanya Vriddhi and Kshaya Lakshanas if observed or noted. **Teachers role:** Teacher assess students by using checklist. **Checklist:** Yes/No 1. Perform Stanya Pareeksha efficiently 2. Questionnaire prepared includes all the Stanya Vriddhi and Kshaya Lakshanas 3. Analyse the probable Nidana of Stanya Vriddhi and Kshaya Lakshanas in lactating mothers 4. Demonstrate good communication skills and rapport-building during the survey
NLHP 4.4	Preparation of Swarnaprashana	**Duration:** 1 hour **Pre-Preparation:**

		By the Teacher: Introduction: Initially teacher will brief about different methods of preparation of Swarnaprashana and its administration through Handouts/videos. **By the Student**: Students are expected to study Swarnaprashana preparation in detail before coming to the class. **Activity** 1.Students are divided into groups. 2. Each group is instructed to follow any one method of preparation of Swarnaprashana or a method that they adopt or practice in college or in their particular region. 3. Students are instructed to prepare Swarnaprashana followed by administration of the same. 4. Analyse the dose according to age

Topic 5 Bala Poshana (Child Nutrition) & Vyadhikshamatva (Immunity) (LH :5 NLHT: 5 NLHP: 8)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO 1,CO 5,CO 6	Describe age related nutritional needs of infants, children and adolescents	CK	MK	K	DIS,BL, L&PPT	INT,PRN,O-QZ	F&S	I	V-SW	LH
CO 1,CO 5,CO 6	Describe the method of calculating micronutrients in children	CC	NK	KH	EDU,PSM,L&PPT	T-CS,O-GAME,PRN	F	I	-	LH
CO 1,CO 3,CO 5	Describe the tools and methods for assessment of nutrition in children.Classify the nutritional status of infants, children and adolescents	CC	MK	K	DIS,L&PPT ,PSM	O-QZ,T-CS	F&S	I	-	LH
CO 1,CO	Assess and classify the nutrition status of infants, children and adolescents and recognize deviations. Assess the quality of each	AFT-RES	MK	SH	D-BED, SIM,PT	CHK,DOPS,DOPS,P-	F&S	I	V-SW	NLHP5.1

4,CO 5,CO 6	Dhatu and its deviations. Assess the Ayurveda attributes of Ahara in a given child. [Agni, Guna of Ahara, Satmya and Asatmya]. Educate parents and child regarding the importance of Ahara, Pathya, Apathya and other possible Ahara Gunas. Plan an appropriate diet for each child using nutritional principles and Ahara Niyamas and communicate the plan to caregivers.					CASE				
CO 3,CO 5	Analyse factors affecting Vyadhikshamatwa/ Bala and Immunity in the present era.	CAN	MK	KH	FC,DIS, BS	INT,PRN,C HK	F&S	I	-	NLHT5.1
CO 3,CO 5,CO 6	Enlist methods to improve Vyadhikshamatwa / Bala and Immunity including Oushadhas, Kriyakramas, Lehana, Rasayana, Prakarayoga, Samskara and Immunization	CK	MK	K	FC,SDL ,TBL	CR-W,CO M,CHK	F&S	I	-	NLHT5.2
CO 3,CO 4,CO 5	Counsel the parents about methods to improve Immunity in children.	AFT-RES	MK	SH	SIM,RP ,EDU	RS,CHK,P-RP	F&S	I	-	NLHP5.2
CO 4,CO 5,CO 6	List and explain the components, Key strategies, and highlights of the Reproductive Child Health (RCH) program. Explore Ayurveda concept, practices and scope of preconception and antenatal care aimed at ensuring the birth of a healthy child. Construct the care plan for the first 1,000 days of the child's life from conception until 2 years of age (24 months).	CAN	MK	KH	IBL,PrB L,TPW	CHK,COM, PRN	F&S	I	-	NLHT5.3
CO 5,CO 8	Explain the Universal Immunization Program	CC	MK	K	L&GD, ML,L_ VC	PRN,QZ ,O-GAME	F&S	I	-	LH
CO	Demonstrate the correct administration of different vaccines on a	PSY-	MK	SH	RP,D-	DOPS,OSC	F&S	I	-	NLHP5.3

4,CO 5,CO 7,CO 8	manikin. Observe the method of administration and recognize the adverse events following Immunization. Document Immunization in an Immunization record	GUD			M,PT	E,DOPS,CHK				
CO 5,CO 8	Explain the components of National Immunisation Schedule.	CC	MK	K	L&GD, L_VC,EDU	PRN,M-CHT,QZ	F&S	I	-	LH

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 5.1	Vyadhikshamatwa and Immunity I	**Duration:** 1 hour **Pre-Preparation:** 1. The teacher informs the topic of discussion one week prior to the activity. 2. The student is expected to come prepared for the group discussion. **Key points for discussion:** 1. Concept of Immunity in the Pediatric Population 2. Role of environmental factors, diet and regimen in Immune regulation **Class Activity** 1. Students will be divided into groups (15-20 in one group) 2. The facilitator will open the discussion 3. Students are expected to discuss and analyze the factors affecting Vyadhikshamatwa 4. Each group will present their opinions 5. Consensus building; students will draw an opinion near the conclusion.
NLHT 5.2	Vyadhikshamatwa and Immunity II	**Pre-Preparation:** 1. The teacher informs the topic of discussion 1 week before the activity. 2. Students are expected to come prepared with the topic discussion. **Key points for discussion:** 1. Concept of Immune modulation

		2. Role of medicines and procedure-based therapies in Immune regulation 3. Concept of Lehana, Bala Rasayana, Prakarayoga and Samskaras 4. National Immunization Schedule - updated version **Class Activity:** Group Discussion 1 hour 1. Students will be divided into groups (15-20 in one group) 2. The facilitator will open the discussion 3. Students are expected to discuss the methods to improve Vyadhikshamatwa **Presentation:** 1 hour 1. Each group will present their opinions 2. Consensus building; students will draw an opinion near the conclusion **Teachers Role:**Student's performance will be evaluated using a checklist. **Checklist**- Yes/No 1. Pre-preparedness of the subject 2. Factors modulating immunity detailed 3. Role of Oushadha in Immune modulation detailed 4. Role of Kriyakrama in Immune modulation detailed 5. Role of Lehana and Rasayana in Immune modulation detailed 6. Role of Prakarayoga in Immune modulation detailed 7. Role of Samskara in Immune modulation detailed 8. Active participation
NLHT 5.3	RCH programmes and Perinatal care for Healthy Child	**Pre-preparation** **By the Teacher:** The teacher informs the topic and group division (Min 6 to 10) 1 week before the class activity. **By the Student:** 1. Identify a Question: What factors in the Antenatal & Postnatal period have an impact on a child's growth and development? 2. Conduct Background Research: Explore topics such as nutrition, breastfeeding, immunization, preconception, antenatal, perinatal and post-natal care. Factors affecting Vyadhikshamatwa in children. Role of Garbhopakrama, Soothikopakrama and Balopakrama (first 1000 day care) in Immune modulation.

		3. Formulate Hypothesis: Predict how specific factors (e.g., breastfeeding, maternal diet) might influence a child's physical and cognitive development. RCH programs and their effect on child health. Role of Garbhini, Soothika and Bala Upakrama in Immune modulation. 4. Plan and Conduct Investigations: Interviewing healthcare professionals about the impact of Antenatal & Postnatal on the child's growth and development. Surveys can also be planned in public. 5. Analyze Data: Analyze data from surveys or interviews to understand the impacts of various factors. **Class activity** **Group Discussion:** 1hour 1. Students sit in their respective groups and discuss on the assigned topic. **Presentation:** 1 hour 1. Communicate findings: Present findings through a report/presentation emphasizing the importance of Antenatal (Garbhopakrama) & Postnatal (Soothikopakrama & first 1000-day child care)in shaping a child’s future. **Teachers role:** 1. Facilitate group discussion and guide students with references 2. Evaluate student's performance based on checklist/rating scale
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 5.1	Nutritional Assessment in children	**Duration:** 3 hours **Preparation /Pre-requisites** **By the teacher:** 1. Arrange Healthy children and malnourished cases/ simulated patient/ case vignettes in all age groups - infants, children and adolescents 2. Equipment for recording anthropometry **By the Student:**Student is expected to come prepared with the knowledge of methods for assessment and classification of nutritional status, age-related nutritional needs of infants, children and adolescents, normal functions of each Dhatu, Vridhi Kshaya Lakshana, Ahara guna and Ahara niyamas **Activity** **Clinical Classroom**

		Students are divided into 6 groups (3-8 members in one group) and sent to OPD/IPD. Each group will be assigned a healthy/ malnourished case from a specific age group. Group I – Healthy infant Group II – Malnourished infant Group III – Healthy child Group IV – Malnourished child Group III – Healthy adolescent Group V – Malnourished adolescent **Bedside -** Case taking -1 hour 1. Rapport building 2. History taking (Details on diet and regimen) 3. Clinical examination **Clinical classroom** -2 hours 1. Discuss the assessment of nutritional status in the allotted group 2. Discuss Ahara Guna, level of Agni and other factors affecting poshana 3. Plan a diet schedule in the given case considering Ahara Niayamas 4. Presentation of the case [Each group will present the assigned case] 5. Role-play – Counsel the parent and child regarding the importance of Ahara, Pathya, Apathya and other Ahara gunas 6. Recording case in the record book. T**eachers role:**Teachers evaluate students' performance through a checklist/DOAP Form. **Checklist-** Yes/No 1. Pre-preparedness of the subject 2. Rapport building with the patient was good 3. Chronology of the case sheet maintained 4. Nutritional status assessed 5. Quality of each Dhatu assessed 6. Attributes of Ahara assessed 7. Educating parents regarding the importance of diet and regimen
NLHP 5.2	Parent Counselling on Immune modulation	**Duration -** 2 hours

		Roles and Responsibilities 1. One student will be assuming the role of parent of an Immunocompromised child 2. One student will be assuming the role of physician providing Counselling to the parent **Pre-preparation by the students** 1. The Student has to be aware of the role of Oushadha, Ahara, Vihara, Rasayana and samskara in Immunity 2. Read the references 3. Students should have empathy and good communication skills **Execution of Role Play:** Enacting the role of the parent and the physician providing Counseling after establishing good rapport **Feedback and Debriefing:** The teacher evaluates students' performance based on a checklist/rating scale and provides inputs. The teacher summarises the points to be noted during Parental counseling. **Checklist- Yes/No** 1. Pre-preparedness of the subject 2. Role of Oushadha, Ahara, Vihara, Rasayana and Samskara in Immunity explained 3. Active participation 4. Empathetic 5. Good Communication skills 6. Ensure that parents understand the instructions
NLHP 5.3	Immunization in children	**Duration -** 3 hours **Preparation /Pre-requites by teacher** 1. Identifying children who are fit for vaccination: Provide handouts 1 week before the session 2. Procure the vaccines in the NIS 3. Preparation of equipment and manikin and its sizes/numbers for vaccination 4. Check for the expiry of vaccination if any 5. Check for colour changes of vaccines if any 6. Check if cold storage is maintained **Preparation /Pre-requites by student** The student is expected to come prepared with the knowledge of the National Immunization schedule,

		different vaccines with dosage schedules, mode of administration and contraindications **Observation (1 hour)** Students are divided into groups (3-8 members in one group) and sent to vaccination centre. Each group will be given a chance to observe vaccination in children. 1. Observe for fitness of vaccination 2. Observe the procedure of vaccination and check for any adverse events **Clinical classroom (2 hours)** 1. Discuss different vaccines, with dosage schedules, mode of administration and contraindications 2. Discuss the adverse effects 3. Presentation of the case [Each group will present one case of vaccination] 4. Document the case in the record book. 5. Teacher the demonstrates the administration of vaccine on a manikin. Each group will be demonstrates the entire procedure of vaccination on a manikin. **Teachers Role:** Evaluation using checklist **Checklist**- Yes/No 1. Checks for fitness for immunization 2. Choose the correct vaccines according to age 3. Check for expiry of the vaccine. 4. Administers vaccine on manikin efficiently.

Topic 6 Kuposhana Rogas (Nutritional disorders) (LH :6 NLHT: 3 NLHP: 4)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO 1,CO 2,CO 3	Define Malnutrition and Classify Undernutrition according to WHO. Define Severe Acute Malnutrition (SAM) and Moderate Acute Malnutrition (MAM). Describe the etio-pathogenesis, clinical features, complication and management of Severe Acute Malnutrition (SAM) and Moderate Acute Malnutrition (MAM)	CC	MK	K	CD,DIS ,L&PPT	T-CS,CBA, C-VC	F&S	II	-	LH
CO 2,CO 3	Define Failure to Thrive(FTT) and describe the etiopathogenesis, clinical features and management of a child with FTT	CK	MK	K	L_VC,C D,DIS	T-CS,CBA, PM	F&S	II	-	LH

CO 2,CO 3	Define Phakka Roga and explain the Nidana, Bheda, Samprapti, Lakshana and Chikitsa of Phakka Roga.	CC	MK	K	L&GD, RLE,CD	T-CS, C-VC,PM	F&S	II	-	LH
CO 2,CO 3,CO 6	Define Kumara Shosha and explain nidana, samprapti, lakshana and chikitsa of Kumara Shosha	CC	MK	K	L&GD, CD	CBA,T-CS,PM	F&S	II	-	LH
CO 2,CO 3,CO 6	Explain nidana, samprapti, lakshana and chikitsa of Karshya. Define Parigarbhikam and explain the nidana, samprapti, lakshana and chikitsa of Parigarbhikam	CC	MK	KH	L&GD, CD,L_VC	INT,T-CS, C-VC	F&S	II	-	LH
CO 2,CO 3	Analyse Phakka Roga with Neuromotor disabilities, SAM, MAM and Failure to thrive and plan the management	CAN	MK	KH	CD,CBL,PBL	C-VC,T-CS	F&S	II	-	NLHT6.1
CO 2,CO 3	Compare and analyse Kumarashosha, Karshya and Parigarbhika with SAM, MAM and Failure to thrive	CAN	MK	KH	FC,BS, BL	CHK,DEB, PRN	F&S	II	-	NLHT6.2
CO 2,CO 3,CO 6	Diagnose and plan the management of a case of malnutrition and analyse the lakshana, samprapthi and management of Kumarashosha, Karshya and Parigarbhika	PSY-GUD	MK	SH	CBL,PT,RP	CHK,SP,P-CASE	F&S	II	-	NLHP6.1
CO 2,CO 3	Describe causes, diagnosis and management of Iron deficiency anemia.	CK	MK	K	LRI,L&PPT,CD	PM,O-QZ,T-CS	F&S	II	-	LH

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity

NLHT 6.1	Concept of Phakka Roga	**Preparation /Pre-requisites** **By the Teacher:** Assign a case vignette for each group 1 week before the activity. **By the Student:** Student is expected to come prepared with etiopathology, symptomatology and management of Phakka Roga. **Clinical classroom discussion - 1 hour** Groups are expected to: 1. Track the development of the child - gross, fine, language and social 2. Check out for status of nutrition and classify. 3. Analyse the etiopathology and symptoms of the case with Neuromotor disabilities, SAM, MAM and Failure to thrive. 4. Frame the Samprapti for the disease in the given case. 5. Plan management and justify Samprapti. **Presentation - 1 hour** 1. Each group will present their case and analyse Phakka Roga with Neuromotor disabilities, SAM, MAM and Failure to thrive and plan the management 2. Role-play – Explain the care plan, Pathya Ahara and Vihara to the child and parent.
NLHT 6.2	Kuposhana Janya Vyadhis and Nutritional Deficiency Disorders	**Duration** - 1 hour **Activity: Group discussion** 1. Students will be divided into groups (15-20 in one group) 2. The facilitator will open the discussion 3. Students expected to discuss the key points in Differential Diagnosis of Kuposhana Janya Vyadhis and compare it with Nutritional deficiency disorders 4. Each group will present their opinions 5. Consensus building; students will draw an opinion near the conclusion **Teacher's Role:** Facilitate group discussion and provide inputs.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**

NLHP 6.1	Case Discussion: Malnutrition	**Preparation /Pre-requisites** **By the Teacher:** Arrange Real Case/ Simulated case/ Case Vignette **By the Student:** 1. The student is expected to come prepared with etiopathology, symptomatology, management, and pathya-apathya of Malnutrition, Kumarashosha, Karshya and Parigarbhika. 2. Growth chart, measuring tape, weight and height machine. **Activity** Students are divided into groups of 5-8 members and sent to OPD/IPD. Assign 2 cases to each group. **Bedside (in real case) Case taking/ Building the case – 2 hours** 1. Rapport building 2. History taking 3. Clinical Examination and Anthropometric evaluation **Clinical classroom discussion - 2 hours** Groups are expected to: 1. Plot the measurement on a graph and analyze the growth of the child. 2. Classify Malnutrition according to WHO. 3. Analyse the etiopathology and symptomatology of Malnutrition with Karshya/ Parigarbhika/ Kumara Shosha. 4. Frame the Samprapti for the disease in the given case. 5. Plan management and justify Samprapti Vigatana. 6. Each group will present their case. 7. Role-play – Explain the care plan, Pathya Ahara and Vihara to the child and parent. 8. Record the case in a record book. **Teachers role**: Guide students in analyzing the case and evaluate using a checklist. **Checklist**- Yes/ No 1. Rapport building established 2. Empathy & communication skills noticed 3. Record the case history in detail 4. Performs clinical examination and anthropometric screening effectively 5. Proper utilization and recording of the Growth chart

		6. Frames Samprapti accurately. 7. Management strategy framed effectively 8. Explain diet and regimen to the patient effectively

Topic 7 Balaroga Pariksha Vidhi & Chikitsa Siddhantha (Pediatric Examination and treatment principles) (LH :5 NLHT: 0 NLHP: 16)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO 3,CO 4,CO 8	Construct a Paediatric case taking format	CAP	MK	KH	W,L&GD,DIS	INT,CWS	F&S	II	V-RN	LH
CO 2,CO 3,CO 8	Explain Bheshaja Matra for Shodana and Shamana in children	CC	MK	K	L&PPT,ML,DIS	T-CS,WP	F&S	II	-	LH
CO 2,CO 3	Explain different methods of drug dose determination in paediatric population	CC	MK	K	TUT,L&GD,ML	P-PS,T-CS,O-GAME	F&S	II	-	LH
CO 2,CO 3	Demonstrate calculation of different drug dosages in paediatric conditions.	PSY-MEC	MK	SH	PBL,EDU,PSM	T-CS,P-PS,CHK	F&S	II	-	NLHP7.1
CO 2,CO 3,CO 8	Explain general treatment principles in children	CC	MK	K	L&GD,TUT	DEB,WP,CR-W	F&S	II	-	LH
CO 2,CO 3	Analyse Vedana Vijnana and observe various clinical presentations	CAN	MK	KH	BS,DIS,L&GD	DEB,INT	F&S	II	-	LH

CO 2,CO 4,CO 7	Demonstrate examination of Dosha, Dhatu, Koshta, Agni, possible Prakriti, Rogamarga of each disease in Paediatric case.	PSY-MEC	MK	SH	SIM,PT, D-BED	CHK,P-CASE,SP	F&S	II	-	NLHP7.2
CO 2,CO 3	Formulate a possible Samprapti for various diseases (using Nidana, Poorvarupa, Roopa and Upashaya)	CAP	MK	KH	PT,FC, CBL	CHK,T-CS,M-CHT	F&S	II	-	NLHP7.3
CO 2,CO 3,CO 6,CO 7	Perform clinical case taking including history taking, clinical examination, diagnostic workup, analysis of Samprapti Ghatakas and Chikitsa Nirnaya.	PSY-GUD	MK	SH	SIM,D-BED,PT	CWS ,CHK ,P-CASE	F&S	II	-	NLHP7.4
CO 2,CO 4,CO 6,CO 8	Educate the caretaker on the prescription including name of the medicine, mode of administration, anupana and time of administration.	AFT-RES	MK	SH	SIM,RP ,TBL	CHK,SP,P-RP	F&S	II	-	NLHP7.5
CO 2,CO 3,CO 6	Identify commonly used single drugs in Paediatric practice and discuss their medicinal uses	CK	DK	K	FV	P-ID,QZ ,O-QZ	F	II	V-DG	NLHP7.6

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 7.1	Calculation of Pediatric Drug Doses	**Duration -** 2 hours

		Pre-Preparation **By the teacher:** Arrange real case/case vignette. Provide reference or handout on overview of Posology **By the Student:** The student is expected to study drug dosage schedules in different ages with different Kalpanas in specific therapeutic indications like Shamana and Shodhana **Activity** 1. Students are divided in groups 2. Assigned 1 real case / Case Vignette 3. Students are expected to– a. Record the weight of the child b. Assess the status of Agni and Koshta c. Calculate drug dosage in different ages/ Kalpanas / therapeutic indications d. Record dosage, Anupama and Oushadha kala **Clinical classroom** 1. Discuss the assessment of drug dose in the allotted group 2. Discuss role of age, level of Agni, other factors affecting dosage like Oushadha Kalpana and treatment indications like Shamana, Sodhana **Teacher's Role**: The teacher will assess using a checklist. **Checklist -** Yes/ No 1. Assess the status of Agni and Koshta effectively. 2. Calculated drug dosage in different ages, Kalpanas & therapeutic indications efficiently. 3. Explains dosage schedule, Anupana and Oushadha kala in a given case accurately.
NLHP 7.2	Application of Samprapti Gatakas in a Pediatric Case: Part I	**Duration:** 2 hours **Pre-preparation:** **By the Teacher**: Arrange the real case/Simulated case/ Case Vignette. Provide an overview of Samprapthi ghatakas **By the Student :** The student is expected to know Samprapti Ghatakas **Activity** Students are divided into groups (3-8 members in one group) and sent to OPD/ IPD. Each group will be given cases for assessment

		Bedside: 1 hour 1. Rapport building 2. Clinical examination 3. Comment on Prakruti of child 4. Assess the Dosha and Dhatu 5. Assess the status of Agni, Koshta 6. Frame Samprapti of disease and comment on Rogamarga **Clinical classroom:** 1 hour 1. Group discussion about Vyadhi Ghatakas 2. Justify analysis of Vyadhi Ghatakas with logical explanations and classical references 3. Presentation of the case [Each group will present one case] 4. Recording the case in the record book.
NLHP 7.3	Application of Samprapti Gatakas in a Pediatric Case: Part II	**Duration:** 1 hour **Pre-preparation:** **By the Teacher:** Arrange the real case/Simulated case/ Case Vignette. Provide an overview of Samprapthi Ghatakas **By the Student :** The student is expected to know Nidana Panchaka and Samprapti Ghatakas **Activity** Students are divided into groups (3-8 members in one group) and sent to OPD/ IPD. Each group will be given cases for assessment **Bedside –** 1. Rapport building 2. Clinical examination 3. Analyzing the history and clinical examination findings concerning Samprapti Ghatakas 4. Frame Samprapti of disease and comment on Nidana Panchaka **Clinical classroom** 1. Group discussion about Nidana Panchaka and Vyadhi Ghatakas 2. Justify the analysis of Vyadhi Ghatakas with logical explanations and classical references 3. Discussion on Samprapti and Nidana Panchaka 4. Presentation of the case [Each group will present one case]

		5. Recording the case in the record book.
NLHP 7.4	Clinical case taking	**Duration** - 9 hours (One group should analyze, present and record minimum 5 cases) **Pre-preparation:** **By the Teacher**: Arrange and assign the real case/Simulated case/ Case Vignette. **By the Student:** Student is expected to have knowledge about clinical case taking and Samprapti ghatakas. **Activity** Students are divided into groups (3-8 members in one group) and sent to OPD/ IPD. Each group will be assigned cases for analysis **Bedside** 1. Rapport building 2. History taking 3. Clinical examination 4. Analyse evidence from history and clinical examination findings in respect to Samprapti Ghatakas 5. Frame Samprapti of disease and comment on Nidana Panchaka **Clinical classroom** 1. Group discussion about Vyadhi Ghatakas 2. Justify the analysis of Vyadhi Ghatakas with logical explanations and classical references 3. Discussion on Samprapti and Nidana Panchaka 4. Perform the diagnostic workup with investigations and differential diagnosis 5. Frame a management protocol for the disease (Teacher will provide a prescription with logical explanations) 6. Discuss the Upasaya and Anupasaya of the given treatment. 7. Presentation of the case [Each group will present a Minimum of 5 cases] 8. Record the case in a record book.
NLHP 7.5	Conseling regarding patient care	**Duration** - 1 hour Purpose – Sensitise parents regarding the administration of medicine.

		Pre -Preparation **By the Teacher:** Arrange prescriptions of common diseases. **By the Student:** Students should have the knowledge about the common medications, pediatric posology, Anupana, Oushadhakala and mode of administration. **Activity:** Students are assigned prescriptions and are expected to role-play randomly. Roles and Responsibilities 1. One student will be assuming the role of parent 2. One student will assume the role of Kaumarabhritagyna, educating to the parent on the administration of medicine. 3. Execution of Role Play **Teacher role:** Feedback and Debriefing Summarise the points to be noted during Parental education on the administration of medicine.
NLHP 7.6	Pediatric Ethobotonical Survey of Herbal Garden	**Duration** - 1 hour **Pre-Preparation:** **By the Teacher:** Identify common single drugs that can be used in Paediatric practice in Herbal garden and plan the visit. **By the student:** The student is expected to know about commonly used single drugs in Paediatric Practice Activity **Herbal garden:** 40 mins 1. Teachers introduce the single drugs that can be used in Paediatric practice in Herbal garden 2. Students are divided into groups (3-8 members in one group) and sent to the Herbal garden. Each group will be given a drug for a detailed study 3. Plant identification with morphological features 4. Identify the medicinal part of the plant 5. Rasa, Guna, Veerya, Vipaka, Prabhava and Amayika Prayoga **Clinical classroom:** 20 mins 1. Discuss the Pharmacodynamics 2. Group discussion about different uses of the drug, dose and Anupama 3. Justify with classical references if any

		4. Presentation of the drug details [Each group will present one drug]

Topic 8 Kulaja and Sahaja Rogas (Genetic and Congenital Disorders) (LH :5 NLHT: 2 NLHP: 5)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO 2,CO 3	Describe the clinical presentations of Cleft Palate, Cleft Lip and Tracheo-Esophageal Fistula.	CK	DK	K	TUT,L &PPT	QZ ,P-ID, C-VC	F&S	II	-	LH
CO 2,CO 3	Describe the clinical presentations of Spinal Dysraphism and Congenital Talipes Equinovarus.	CK	DK	K	L_VC,L &PPT	O-QZ, C-VC	F&S	II	-	LH
CO 2,CO 3	Describe the clinical presentations of Congenital Hypertrophic Pyloric Stenosis and Congenital Anomalies of Anus.	CK	DK	K	TUT,L &PPT ,L_VC	P-ID,O-GAME, C-VC	F&S	II	-	LH
CO 2,CO 3	Describe the clinical presentations of Congenital Heart Disease.	CK	DK	K	L&PPT ,L_VC, LRI	O-QZ,P-ID, C-VC	F&S	II	-	LH
CO 2,CO 3,CO 6,CO 8	Analyse the scope of Kriyakrama (Procedure based therapies) and Oushadhas in Sahaja Vyadhis	CAN	DK	K	CBL,FC ,EDU	PRN,CHK, CBA	F&S	II	-	NLHT8.1
CO 2,CO 3,CO 8	Recognise the indications of surgical intervention and referral criteria in different Congenital and Chromosomal disorders.	CAN	DK	KH	CBL,DIS,FC	CBA,SBA, CHK	F&S	II	-	NLHT8.2
CO	Identify the Chromosomal abnormality, clinical features,	CAN	MK	KH	FC,LRI,	P-CASE, C-	F&S	II	-	NLHP8.1

2,CO 3,CO 8	diagnosis, risk factors and and plan the management in a case of Turner syndrome				CBL	VC,CHK				
CO 2,CO 3,CO 8	Identify the Chromosomal Abnormality, clinical features, diagnosis, risk factors and plan the management in a case of Down syndrome. Interpret normal Karyotype and recognize Trisomy 21	CAN	MK	KH	LRI,FC, CBL	C-VC,CH K,P-CASE	F&S	II	-	NLHP8.2
CO 2,CO 3,CO 4,CO 8	Analyze the role of preconception care (ideal Ritu, Kshetra, Ambu and Beeja) in preventing congenital diseases. Educate the caregivers about the scope of Ayurveda in the prevention of congenital anomalies through preconception care.	AFT-RES	DK	SH	BS,RP, FC	CHK,P-RP,CR-W	F&S	II	-	NLHP8.3
CO 2,CO 3,CO 6	Explain Muscular Dystrophies and enlist prevalent Muscular Dystrophies. Describe the etiopathogenesis, clinical features and management of Duchenne Muscular dystrophy (DMD). Derive complementary and alternative treatment protocol to DMD.	CAP	MK	K	TUT,DIS,L&PPT	T-CS, C-VC	F&S	II	-	LH

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 8.1	Procedure based therapies and Oushadhas in Sahaja Vyadhis	**Duration** - 1 hour **Pre-preparation** **By the teacher:** Arrange the problem /case to be solved & provide an overview of the Ayurveda perspective on Sahaja Vyadhis and procedure-based therapies through handouts or PPT. **By the Student:** Student is expected to study Sahaja Vyadhis, general treatment guidelines and a therapeutic indication of Kriyakrama (Procedure based therapies) **Activity** 1. Students are divided in groups and assigned a case vignette to each group 2. Students gather in groups and are expected to – A. Note clinical features of Sahaja Vyadhis and interpret the Dosha, Dhathu and analyse the Samprapti

		B. Plan management strategy and suitable procedure-based therapies C. Discuss the management plan with the selection of medicines D. Discuss the Samprapti Ghatakas of the specific Sahaja Vyadhi E. Discuss specific stages of the disease and change in the selection of Kriyakrama and analyze the Samprapti Vighatana
NLHT 8.2	Surgical intervention and referral criteria of Congenital and Chromosomal disorders	**Duration** - 1 hour **Pre-preparation** **By the teacher:** The teacher introduces the students to the problem /case to be solved & provides an overview of the scope of surgical intervention in Sahaja Vyadhis one week before the activity. Divide the students in group and assign one case to each group. **By the Student:** Student is expected to study Sahaja Vyadhis and management strategy. **Activity** 1. Students gather in group 2. Students are expected to discuss- A. Note clinical features and clinical examination findings of given Sahaja Vyadhis B. Screen for any emergency situations if any C. Screen for the scope of surgical intervention in the given case. D. Discuss the referral criteria in the case E. Counsel the parent for referral and give a proper Referral card F. Present the findings to the class.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 8.1	Turner syndrome	**Duration** - 1 hour **Pre-preparation** **By the teacher:** Provide an overview of Turner syndrome and its Ayurveda perspective through handouts/PPT/Pre-recorded Video. **By the student:** Student is expected to study Turner syndrome and analyse the Samprapti Ghatakas of

		the disease **Activity** 1. Students are divided in groups 2. Provide 1 real case/ simulated case/ case vignette/ case video to each group 3. Students are expected – A. Perform/record clinical examination of given Turner syndrome case (Bedside if real case) B. Analyze the Samprapti Ghatakas C. Discuss the Karyotype report D. Discuss the management protocol considering the Samprapti Ghatakas E. Enlist the risk factors and complications
NLHP 8.2	Down syndrome	**Duration** - 3 hours **Objective:** 1. Discuss the genetic composition and clinical features of Down syndrome 2. Frame diagnostic workout including Karyotyping 3. Frame management protocol 4. Enlist the risk factors and complications **Pre-preparation** **By the teacher:** 1. Provide an overview of Down syndrome and its Ayurveda perspective through handouts/PPT/Pre-recorded Video. 2. Divide the students in group and assign one real case/case vignette (Different presentation of down syndrome to each group) By the Student: The student is expected to study Down syndrome and analyze the Samprapti Ghatakas of the disease **Bedside** (in real case) 1 hour 1. Students are divided into 5- 6 groups and assigned a case 2. Students are expected to– A. Take the history B. Perform/record clinical examination C. Check for any associated diseases

		D. Check whether antenatal screening was done E. Check for etiology and predisposing factors F. Collect the Karyotype report G. Enlist the risk factors and complications **Clinical classroom discussion and presentation** - 2 hours Each group will be allotted a specific topic for discussion and will be given 10 minutes to present their findings 1. Discuss the clinical features and examination findings of given Down syndrome 2. Discuss the etiology and predisposing factors 3. Discuss the antenatal screening measures 4. Discuss the common associations 5. Discuss the diagnostic workup 6. Discuss Rehabilitation measures 7. Discuss the Samprapti Ghatakas and frame management strategy 8. Analyze the risk factors 9. Conclusion and summarise the disease by the teacher. **Teacher Role**: Facilitate group discussion and guide on interpretation of investigation reports.
NLHP 8.3	Prevention of Congenital anomalies	**Duration** - 1 hour **Pre-preparation** **By the Teacher:** 1. Divide the students in 2 groups and assign the activity 1 week prior. 2. Pre-validation of role play. **Roles and Responsibilities** 1. One student will be assuming the role of parent 2. One student will assume the role of Kaumarabhritagyna educating the caregiver. **By the Student:** 1. The student has to be aware of the details of preconception care for the prevention of Congenital anomalies 2. Analyze the role of preconception care (ideal Ritu, Kshetra, Ambu and Beeja) in preventing congenital diseases.

		Clinical classroom 1. First group presents the of role of preconception care (ideal Ritu, Kshetra, Ambu and Beeja) in preventing congenital diseases. 2. Second group executes the Role Play. Enacting the role of the parent and the Physician providing Counseling after establishing a good rapport **Feedback and Debriefing** Summarise the points to be noted during Parental education and the role of preconception care (ideal Ritu, Kshetra, Ambu and Beeja) in preventing congenital diseases by the teacher.

Topic 9 Graha Rogas and Aupasargika Rogas (Infectious Diseases) (LH :7 NLHT: 4 NLHP: 3)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO 2,CO 3	Explain Lakshana(clinical features) and Chikitsa(management) of Rohini(Diphtheria), Masurika(Chicken pox), Romantika(Measles).	CC	MK	K	LRI,L& PPT ,CD	T-CS, C-VC,WP	F&S	II	-	LH
CO 2,CO 3	Explain Lakshana(clinical features) and Chikitsa(management) of Karnamoola Shotha(Mumps), Hand foot Mouth Disease(Masurika).	CC	MK	K	CD,LRI ,L&PPT	QZ , C-VC,T-CS	F&S	II	-	LH
CO 2,CO 3	Describe etiopathogenesis, clinical features, complications and management(Chikitsa) of Malaria, Hepatitis and Dengue.	CK	MK	K	LRI,L& GD,CD	T-CS, C-VC,O-QZ	F&S	II	-	LH
CO 2,CO 3	Describe etiopathogenesis, clinical features, complications and management(Chikitsa) of Whooping cough and Tuberculosis.	CK	MK	K	X-Ray, L&GD, CD	INT,T-CS	F&S	II	-	LH
CO 3,CO 6,CO 8	Discuss the management(Chikitsa) of tuberculosis with the caregivers.	AFT-RES	MK	SH	TBL,RP	CHK,RS	F&S	II	-	NLHT9.1

CO 2,CO 3	Describe pathogenesis, clinical features, diagnosis and management(Chikitsa) of Tetanus and Meningitis.	CK	MK	K	L&PPT ,LRI	INT, C-VC,PM	F&S	II	-	LH
CO 2,CO 3	Discuss concept of Graha Roga in context of infectious diseases. Describe Samanyalakshana Purvarupa and Bheda of Graharogas.	CAP	DK	KH	TBL,DIS,PER	INT,CHK,RS	F&S	II	-	NLHT9.2
CO 3,CO 6	Analyze the concept and management of Jwara with respect to different types of fever. Identify Dosha and Dushya involved in different types of fevers. Enlist Oushadha Yogas indicated in Jwara. Enlist the ingredients and indications of at least two Samanya Oushadha Yoga and two Vishesha (condition specific) Yogas used in Jwara Chikitsa.	CAN	MK	KH	FC,DIS,TBL	RS,CL-PR,CHK	F&S	II	-	NLHT9.3
CO 2,CO 3	Explain Nidana, Lakshana, Samprapti, Bheda and Chikitsa of different types of Krimi.	CC	MK	K	TUT,L&GD,CD	WP,T-CS	F&S	II	-	LH
CO 2,CO 3	Describe etiopathogenesis, clinical features, complications and management of helminthic infestations in children.	CK	MK	K	L&PPT ,CD	T-CS,PUZ	F&S	II	-	LH
CO 2,CO 3	Enlist Oushadha yogas used for Krimi Chikitsa. Enlist ingredients and indications of at least two Samanya Oushadha Yoga and two Vishesha (condition specific) Yogas used in Krimi Chikitsa and analyze its Samprapti Vighatana.	CC	MK	K	TBL,CBL,FC	CL-PR,RS,CHK	F	II	-	NLHT9.4
CO 2,CO 3,CO 4	Examine a case of Aupasargika Jwara(Fever of Infectious origin) and Krimi Roga. Analyze Nidanpanchaka, Management(Chikitsa) & Samprapti Vighatana of Aupasargika Jwara's.	PSY-GUD	MK	SH	LRI,D-BED,CBL	P-CASE,CHK,CWS	F&S	II	-	NLHP9.1

CO 6,CO 8	Perceive two Kriyakrama(Procedure based therapy) used in the management of Jwara. Perceive two Kriyakrama used in the management of Krimi. Plan Ahara and Vihara for different types of Jwara. Plan Ahara and Vihara for different types of Krimi.	PSY-SET	MK	KH	D-M,D	CHK,INT	F&S	II	-	NLHP9.2

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 9.1	Management(Chikitsa) of tuberculosis in children.	**Duration**: 1 Hour **Pre-preparation:** **By the Teacher:** 1. Dividing the class into 3 groups and assigning the topic to each group one week prior to the activity. A. Group 1: Complementary management approach in tuberculosis Enlist the complications of tuberculosis in the anatomy & physiology of lungs and Side effects of AKT that may happen in tuberculosis and enlist the possible Ayurveda management. B. Group 2: Alternative management approach in tuberculosis Post AKT Management, Pathya-Apathya and Rasayana (Adjuvant approach) C. Group 3: List the criteria for referral and the importance of case registration (District Tuberculosis Center) through role-play. 2. Provide references for preparation 3. Validate the role-play script. **By the Student:** 1. Students are expected to prepare the topic for presentation. Gather information using resources as directed by the teacher. 2. Role play group is expected to write the script and validate before the activity. **Activity:** 1. Students discuss with the groups assigned -10 mins 2. Presentation of the assigned topic by the group leader -20 mins 3. Role play by group 3 -10 mins **Role of Teacher:** Facilitate group discussion and summarize the key points in parental education on the disease.

NLHT 9.2	Concept of Graha Roga in context of infectious diseases.	**Duration:** 1 Hour **Pre-Preparation:** **By the Teacher:** 1. Dividing the class into groups and assigning one Graha to each group one week prior to the activity. 2. Guide the students about references and guidelines for comparison with one example. **By the Student:** 1. Students are expected to study literature regarding Graha Roga and Samanya Lakshana Purvarupa and Bheda of Graharoga. 2. Comparison of different Graha Rogas with infectious and noninfectious diseases prior to class. **Activity:** 1. Students discuss in groups -10 mins 2. Presentation of each Graha Roga and related infectious and noninfectious diseases by group leader – 45 mins 3. Compilate the discussion of all the groups.
NLHT 9.3	Management of different type of Jwara.	**Duration:** 1 Hour **Pre-preparation** **By the Teacher:** Dividing the class into groups and assigning each group with one type of Jwara one week prior to class activity. **By the Student:** 1. Students are expected to study the type of Jwara assigned to them. Compare with different types of fever 2. Identify Dosha and Dushya involved. 3. Enlist Oushadha Yogas indicated in Jwara. 4. Enlist the ingredients and indications of at least two Samanya Oushadha Yoga and two Vishesha (condition specific) Yogas used in Jwara Chikitsa. 5. Understand the Samprapti Vighatana **Class Activity** 1. Students discuss with the groups assigned -10 mins 2. Presentation of assigned topic by the group leader -40 mins

		3. Open discussion between group and feedback 4. Compile discussion of all the group. **Role of the Teacher:** Evaluate the students using checklist/rating scale. **Checklist:** Yes/No 1. Pre-preparedness on the topic 2. Proper use of recourses provided 3. Discuss and Compare Jwara type with different types of fever. 4. Identify Dosha and Dushya involved in Jwara. 5. Enlist Oushadha Yogas indicated in Jwara 6. Enlist the ingredients and indications of Samanya and Vishesha Oushadha Yogas use in regional practice 7. Discuss the Oushadha Yogas and Justify Samprapti Vighatana 8. Shows active collaboration in group and justifies the queries raised
NLHT 9.4	Oushadha yogas used for Krimi Chikitsa.	**Duration:** 1 Hour **Pre-preparation** **By the Teacher:** 1. Preparation of Case Vignette (Different type/presentation of Krimi) 2. Divide the Class into groups (Min 5 to Max 8). 3. Assign one/two case to each group one week prior to the class activity. **By the Student:** 1. Study the Krimi Roga and its Chikitsa in detail. 2. Analyse the case assigned **Class Activity:** 1. Students discuss with the groups assigned -10 mins 2. Presentation of case by the group leader - 40 mins A. Analyze the case assigned B. Diagnose the case 3. Enlist Oushadha yogas used for Krimi Chikitsa. 4. Enlist ingredients and indications of at least two Samanya Oushadha Yoga and Vishesha Yogas used in Krimi Chikitsa and its role in Samprapti Vighatana.

		5. Open discussion between group and summarize the key points by the teacher.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 9.1	Case Discussion: Auspasagika Jwara and Krimi Roga	**Duration:** 2 Hours **Preparation /Pre-Requisites** **By the teacher:** 1. Scheduling the case taking and arranging the case (Real Patient / simulated patient/ Case Vignette) 2. Preparing the checklist for evaluation **By the student:** 1. Student is expected to come prepared with the content of Nidana Panchaka and Chikitsa of Aupasargika Jwara and Krimi Roga 2. Rapport building, proper history taking, thorough examination, appropriate Investigation 3. Present their views in clinical classroom discussion **Activity** **In the clinical classroom:**Students are divided in groups (5-8 members in one group) and sent to OPD/IPD for Bedside - Case taking **Bedside:** Case taking as per the format(Real case) 1. Building rapport with patient 2. History taking 3. Clinical examination **In the clinical classroom:** 1. Students discuss the Nidana Panchaka in the allotted group, differential diagnosis, plan investigations if needed & identify the Samprapti Ghatakas 2. Plan the management and justify the Samprapti Vighatana 3. Presentation of the case [Each group will present one disease or any sub-point of the case] **Role-Play** 1. Explain the care plan, Ahara Vihara & prognosis to parent. 2. Recording the case in record book. **Role of the Teacher:** Teacher evaluates student’s performance based on a checklist/rating scale.

		Checklist: Yes/No 1. Pre-preparedness of the topic 2. Rapport building established 3. Explain the history and symptoms of Aupasargika Jwara in sequence. 4. Explain the history and symptoms of Krimi Rogas in sequence. 5. Local and systemic clinical examination performed. 6. Explain the examination findings accurately. 7. Explain Nidana Panchaka and identify the Dosha-Dushya. 8. Plan Investigations and finalize the diagnosis. 9. Plan the management and Justify Samprapti Vighatana. 10. Explain the care plan and Ahara Vihara to the parent. 11. Explain the prognosis to the parent. 12. Showed active collaboration in group and justifies the queries raised.
NLHP 9.2	Pathya and Kriyakrama used in Jwara and Krimi.	**Duration:** 1 Hour **Activity 1:** 40 minutes Perceive two Kriyakrama used in the management of Jwara. Perceive two Kriyakrama used in the management of Krimi. **Pre-preparation:** **By the Teacher:** 1. Identify the Kriyakrama (Procedure based therapy) used in Jwara 2. Identify the Kriyakrama (Procedure based therapy) used in Krimi 3. Scheduling the demonstration and arranging the patient. **By the Student:** Students are expected to study the Jwara and Krimi and its management in detail prior to the Activity. **Activity:** 1. Teacher/therapist demonstrate the kriyakrama on the patient. 2. Students are expected to observe – A. Pre-procedure specific to procedure (like Handwashing, Wearing Cap/gloves/mask if needed, Collecting the ingredients and equipment's, preparation of medicine, getting the consent, fitness certificate if required, counselling the patient and caretaker)

		B. Procedure (Technique of procedure, communication with the patient and caretaker) C. Post procedure specific to procedure and explaining the Do's and Don't to follow. 3. Assignment: Write the mode of action/Samprapti Vigatana of the procedure) **Activity 2: - 20 mins** Plan Ahara and Vihara for different types of Jwara. Plan Ahara and Vihara for different types of Krimi. **Pre-preparation:** **By the teacher:** 1. Dividing the class into 2 groups and assigning disease to each group one week prior to the class. 2. Guiding the students to prepare the Ahara and Vihara chart of the particular disease assigned. **By the student:** Students are expected to study the disease in detail and prepare the Ahara Vihara chart based on the guidelines given by the teacher. **Activity:** 1. Each group present their Ahara and Vihara chart of the particular disease assigned. 2. Peer discussion on the chart.

Topic 10 Swasana Rogas [Disorders of Respiratory system] (LH :5 NLHT: 4 NLHP: 6)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO 2,CO 3	Describe possible etiology, clinical features, diagnosis and management of Recurrent Upper Respiratory Tract Infections i) Common Cold	CK	MK	K	L&PPT ,CD	PM,CBA,T-CS	F&S	II	-	LH
CO 2,CO 3	Describe the etiology, clinical features, diagnosis and management of Recurrent Upper Respiratory Infection ii) Tonsillitis. Describe the etiology, clinical features, diagnosis and management of Recurrent Upper Respiratory Infection iii) Pharyngitis	CK	MK	K	CD,L& PPT	PM,T-CS, C-VC	F&S	II	-	LH
CO	Describe the etiology, clinical features, diagnosis and	CK	MK	K	X-Ray,	PM,T-CS	F&S	II	-	LH

2,CO 3	management of Recurrent Upper Respiratory Infection iv) Adenoid Hypertrophy.				L&PPT ,CD					
CO 2,CO 3	Describe the etiology, clinical features, diagnosis and management of Pneumonia.	CK	MK	K	X-Ray, CD,L& PPT	C-VC,PM, T-CS	F&S	II	-	LH
CO 2,CO 3	Describe the etiology, clinical features, diagnosis and management of Bronchial Asthma.	CK	MK	K	X-Ray, L&PPT ,CD	C-VC,PM, INT	F&S	II	-	LH
CO 2,CO 3	Enlist Oushadha yogas used for Pratishaya, Kasa, Shwasa. Enlist the ingredients and indications of atleast two Samanya Oushadha Yogas and two Vishesha (condition specific) Yogas used in Pratishaya, Kasa, Shwasa Chikitsa and analyze its Samprapti Vighatana.	CAN	MK	KH	TBL,FC ,DIS	CHK,INT, QZ	F	II	-	NLHT10.1
CO 4,CO 6,CO 8	Plan and explain Ahara and Vihara for Pratishaya, Kasa, Shwasa.	AFT-RES	MK	SH	RP,PER	CHK,P-RP,RS	F&S	II	-	NLHT10.2
CO 2,CO 3,CO 7	Perform otoscopic examination of ear. Perform throat examination in the case of Adenoid Hypertropy, Pharyngitis or Tonsillitis.	PSY-GUD	MK	SH	L_VC, W,KL, D	C-VC,DOP S,CHK,DO PS	F&S	II	H-SHL	NLHP10.1
CO 2,CO 3,CO 4	Demonstate examination, diagnosis and plan Chikitsa for a case of Pratishyaya.	PSY-GUD	MK	SH	RP,D-B ED,CB L	P-CASE,R S,CHK	F&S	II	-	NLHP10.2
CO 2,CO	Demonstate examination, diagnosis and plan Chikitsa for a case of Kasa. Identify the referral criteria for Kasa Roga.	PSY-GUD	MK	SH	D-BED, RP,CBL	CHK,CWS ,P-CASE	F&S	II	-	NLHP10.3

3,CO 4										
CO 2,CO 3,CO 4	Demonstrate examination, diagnosis and plan the Chikitsa for a case of Shwasa. Identify the referral criteria for Shwasa Roga.	PSY-GUD	MK	SH	CD,D-BED,CBL	Mini-CEX, P-CASE,CHK	F&S	II	-	NLHP10.4
CO 7,CO 8	Perceive two Kriyakrama used in the management of Pratishaya, Kasa & Shwasa. Analyse Samprapti Vighatana in Pratishaya, Kasa & Shwasa	PSY-SET	MK	KH	D-BED, D-M	CHK,INT, QZ	F&S	II	H-PK	NLHP10.5

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 10.1	Oushadha Yoga in Pratishaya, Kasa, Shwasa..	**Pre-Preparation:** **By the Teacher:** 1. The teacher will give an overview of the formulations used in Pratishaya, Kasa, Shwasa along with their rationale. 2. Select any two relevant formulations used in Pratishaya, Kasa, Shwasa, which are referenced in Ayurveda Classical Texts and are frequently used by practitioners of the respective state/ region. **By the Student:** Students are expected to come with knowledge of the management of Pratishaya, Kasa, Shwasa. **Activity:** 1 Hour 1. Discuss the list of formulations used in Pratishaya and highlight the two relevant formulations used in Pratishaya. 2. Explain the formulation 3. Discuss the conceptual meaning and interpretation. 4. Divide the students in group 5. Analyze the Samprapti Vighatana in group. 6. Encourage questions and discussion in group. **Activity:** 1 Hour

		1. Discuss the list of formulations used in Kasa, Shwasa, and highlight the two relevant formulations used in Kasa and Shwasa. 2. Explain the formulation 3. Discuss the conceptual meaning and interpretation. 4. Divide the students in group 5. Analyze the Samprapti Vighatana in group. 6. Encourage questions and discussion in group.
NLHT 10.2	Ahara and Vihara for Pratishaya, Kasa, Shwasa	**Pre-preparation:** **By the Teacher:** 1. Divide the class into 3 groups 2. Assign 1 disease to each group (eg Pratishaya, Kasa, Shwasa) 3. Provide guidelines to prepare the Ahara Vihara Chart, role play and highlight the important component of communication. 4. Validate the Role Play script prepared by the student Prior to the activity. 5. Ensure the language is simple and easy to understand by the local people. **By the Student:** 1. Students is expected to understand the disease, Ahara Vihara which is indicated for the particular disease assigned to them. 2. Student is expected to prepare the Ahara Vihara chart and the script of the role and get it validated by the teacher prior to the activity **Activity: Group discussion 1 hour** 1. Students assemble in groups assigned. 2. Group leader present the Ahara Vihara Chart in different types of Pratishaya, Kasa and Shwasa. **Activity: Role play 1 hour** 1. Each group executes the role play **Role of a Teacher:** Teacher evaluates students' performance based on a checklist/rating scale. **Checklist:** 1. Clear explanation of the chart 2. Plans the Diet Chart effectively. 3. List of activities that can be performed

		4. Mentions Satvavajaya Chikista if needed 5. Yoga/Pranayama (Demonstration and explanation) 6. Any internal medications (Explain the importance, dose, route and frequency) 7. Demonstrates empathy and understanding of the patient's emotional state 8. Actively engage the patient, allowing for questions and checking if the caretaker/patient understood. 9. Maintains appropriate eye contact throughout the interaction/presentation 10. Maintains professionalism throughout the interaction/presentation.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 10.1	Examination of Ear and Throat	**Duration -** 1 Hour **Pre-Preparation** **By the Teacher:** 1. Keeping the examination video ready 2. Keeping the Otoscope and other tools required for throat examination ready 3. Dividing the class into groups 4. Arranging the real cases/clinical video cases and assigning them to each group. By the student: Studying the ENT examination before the session **Activity** 1. Teacher displays the video of Otoscopic and throat examination 2. Special precautions and handling the child shall be explained by the teacher. 3. Teacher explains the interpretation of examination finding in different diseases 4. Students gather in the groups assigned 5. Examine the assigned patient/ interpret the examination finding in the given video cases 6. Group leader presents the finding to the class
NLHP 10.2	Case Discussion: Pratishyaya.	**Duration:** 1 Hour **Preparation /Pre-Requisites** **By the Teacher:** Scheduling the case taking and arranging different type of Partishaya case (Real

		Patient / simulated patient/ Case Vignette) **By the student:** 1. Student is expected to come prepared with the content of Nidana Panchaka and Chikitsa of Pratishyaya 2. Rapport building, proper history taking, thorough examination, appropriate Investigation **ACTIVITY** **Clinical classroom:** Students are divided in groups (5-8 members in one group) and sent to OPD/IPD for Bedside - Case taking **Bedside:** Case taking as per the format 1. Building rapport with patient 2. History taking 3. Clinical examination **In clinical classroom:** 1. Students discuss the Nidana Panchaka in the allotted group, differential diagnosis, plan investigations if needed & identify the Samprapti Ghatakas 2. Plan the management and justify the Samprapti Vighatana 3. Presentation of the case [Each group will present any one sub point of the case] 4. ROLE-PLAY – Explain the care plan, Ahara vihara & prognosis to parent. 5. Recording the case in record book.
NLHP 10.3	Case Discussion: Kasa.	**Duration:** 1 Hour **Preparation /Pre-Requisites** **By the teacher:** Scheduling the case taking and arranging different types of Kasa Case (Real Patient / simulated patient/ Case Vignette) **By the student:** 1. Student is expected to come prepared with the content of Nidana Panchaka and Chikitsa of Kasa 2. Rapport building, proper history taking, thorough examination, appropriate Investigation **ACTIVITY** **In clinical classroom:** Students are divided in groups (5-8 members in one group) and sent to OPD/IPD for Bedside - Case taking **Bedside**: Case taking as per the format

		1. Building rapport with patient 2. History taking 3. Clinical examination **In clinical classroom:** 1. Students discuss the Nidana Panchaka in the allotted group, differential diagnosis, plan investigations if needed & identify the Samprapti Ghatakas 2. Plan the management and justify the Samprapti Vighatana 3. Presentation of the case [Each group will present any one sub point of the case] 4. Identify the referral criteria for Kasa Roga. 5. ROLE-PLAY – Explain the care plan, Ahara vihara & prognosis to parent. 6. Recording the case in record book.
NLHP 10.4	Case Discussion: Shwasa.	**Duration:** 1 Hour **Preparation /Pre-Requisites** **By the teacher:** Scheduling the case taking and arranging different types of Shawsa Case (Real Patient / simulated patient/ Case Vignette) **By the student:** 1. Student is expected to come prepared with the content of Nidana Panchaka and Chikitsa of Shwasa 2. Rapport building, proper history taking, thorough examination, appropriate Investigation **ACTIVITY** **In clinical classroom:** Students are divided in groups (5-8 members in one group) and sent to OPD/IPD for Bedside - Case taking **Bedside:** Case taking as per the format 1. Building rapport with patient 2. History taking 3. Clinical examination **In clinical classroom:** 1. Students discuss the Nidana Panchaka in the allotted group, differential diagnosis, plan investigations if needed & identify the Samprapti Ghatakas 2. Plan the management and justify the Samprapti Vighatana 3. Presentation of the case [Each group will present any one sub point of the case]

		4. Identify the referral criteria for Shawsa Roga. 5. ROLE-PLAY – Explain the care plan, Ahara vihara & prognosis to parent. 6. Recording the case in record book.
NLHP 10.5	Kriyakrama used in management of Pratishaya,Kasa & Shwasa	**Duration:** 2 Hour **Pre-preparation:** **By the Teacher:** 1. Identify the Kriyakrama (Procedure based therapy) used in Pratishaya,Kasa and Shwasa 2. Scheduling the demonstration and arranging the patient. **By the Student:** Students are expected to study the concept of Pratishaya,Kasa & Shwasa and its management in detail prior to the Activity. **Activity:** 1. Teacher/therapist demonstrates the kriyakrama on the patient. 2. Students are expected to observe – A. Pre-procedure specific to the procedure (like Handwashing, Wearing Cap/gloves/mask if needed, Collecting the ingredients and equipment, preparation of medicine, getting the consent, fitness certificate if required, counseling the patient and caretaker) B. Procedure (Technique of procedure, communication with the patient and caretaker) C. Post procedure specific to procedure and explain the Do's and Don't to follow. 3. Assignment: Write the mode of action/Samprapti Vigatana of the procedure) 4. Recording the procedure in the record book.

Topic 11 Mahasrota Roga [Gastro Intestinal Disorders] (LH :6 NLHT: 3 NLHP: 6)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO 2,CO 3,CO 6	Describe etio-pathogenesis, classification, clinical presentation and management(Chikitsa) of diarrheal diseases in children. Describe stages of diarrheal dehydration.	CK	MK	K	L&PPT ,CD,DI S	T-CS,PM,S BA	F&S	II	-	LH

CO 2,CO 3	Diagnose and plan Chikitsa for Atisara, Grahani and Pravahika in children. Analyze Samprapti Vigatana.	CE	MK	KH	L&PPT ,CD	T-CS,PM,SBA	F&S	II	-	LH
CO 2,CO 3,CO 6	Describe etio-pathogenesis, classification, clinical presentation and management(Chikitsa) of vomiting in children. Diagnose and plan Chikitsa for Chhardi in children.	CE	MK	KH	CD,L& PPT	T-CS,SBA, PM	F&S	II	-	LH
CO 2,CO 3,CO 6	Define constipation, describe the etiology, diagnosis, complication and management(Chikitsa) of constipation. Diagnose and plan Chikitsa for Vibandha in children. Analyse Samprapti Vigatana.	CE	MK	KH	CD,L& PPT ,DIS	T-CS,PM	F&S	II	-	LH
CO 2,CO 3	Describe etio-pathogenesis, clinical presentation and management(Chikitsa) of stomatitis, rectal prolapse and Fissure in Ano in children.	CK	MK	K	DIS,L& PPT ,CD	PM,T-CS,SBA	F&S	II	-	LH
CO 2,CO 3	Explain etio-pathogenesis, clinical presentation and management(Chikitsa) of Infantile Colic.	CC	MK	K	L&PPT ,CD,DIS	T-CS, C-VC,PM	F&S	II	-	LH
CO 3,CO 4,CO 6	Enlist the Oushadha Yogas used in Atisara, Grahani and Pravahika. Enlist the ingredients and indications of at least two Samanya Oushadha Yoga and two Vishesha (condition-specific) Yogas used for Aatisara, Grahani, and Pravahika Chikitsa and analyze its Samprapti Vighatana. Communicate the plan of Ahara and Vihara for Atisara, Grahani and Pravahika to the caregivers.	AFT-RES	MK	SH	FC,RP, CBL	QZ ,CHK,RS	F&S	II	-	NLHT11.1
CO 3,CO 4,CO 6	Enlist Oushadha Yoga use for Chhardi. Enlist ingredients and indications of at least two Samanya Oushadha Yoga and two Vishesha (condition specific) Yogas used for Chhardi and analyze Samprapti Vighatana.	AFT-RES	MK	SH	TBL,RP ,FC	P-RP,CHK, RS	F&S	II	-	NLHT11.2

	Communicate the plan of Ahara and Vihara for Chhardi to the caregivers.									
CO 2,CO 3,CO 6	Enlist Oushadha Yoga use for Vibandha. Enlist ingredients and indications of at least two Samanya Oushadha Yoga and two Vishesha (condition specific) Yogas used in Vibandha and analyze its samprapti Vighatana. Communicate the plan of Ahara and Vihara for Vibandha to the caregivers.	AFT-RES	MK	SH	PER,FC ,RP	P-RP,RS,C HK	F&S	II	-	NLHT11.3
CO 3,CO 4,CO 6	Analyse physiological basis of ORT. Compare composition of various types of ORS. Communicate and educate parents on home based ORS.	AFT-RES	MK	SH	RP,IBL	CL-PR,RS, CHK	F&S	II	-	NLHP11.1
CO 3,CO 7,CO 8	Perceive two Kriyakrama used in the management of Chhardi and analyse its Samprapti Vighatana.	PSY-SET	MK	KH	D-BED,D	INT,CHK, QZ	F&S	II	-	NLHP11.2
CO 3,CO 7,CO 8	Perceive two Kriyakrama used in the management of Vibandha and analyse its Samprapti Vighatana.	PSY-SET	MK	KH	D-M,D-BED	QZ ,CHK,INT	F&S	II	H-PK	NLHP11.3
CO 2,CO 3	Diagnose and plan Chikitsa for Mukhapaaka, Gulma, Gudabramsa and Parikartika in children and analyse Samprapti Vighatana.	CE	DK	SH	FC,CBL ,PBL	CWS ,RS,CHK	F&S	II	-	NLHP11.4
CO 2,CO 3	Identify the signs and symptoms of GI and Liver disorders (Jaundice, Pallor, Gynaecomastia, Spider angioma, Palmar erythema, Icthyosis, Caput medusa, Clubbing, Failing to thrive). Identify Dosha and Dhatu involved in GI and Liver disorders. Identify signs and symptoms of Vitamin A and D deficiency.	CAP	MK	KH	FC,PBL ,PL	CHK,P-ID,RS	F&S	II	-	NLHP11.5

	Identify the referral criteria of Mahashrotogata Vikaras									
CO 2,CO 3,CO 4	Examine and plan the management for a case of Maha Stroto Vikaras.	PSY-GUD	DK	SH	CD,PT, D-BED	SP,P-CASE,CH K	F&S	II	-	NLHP11.6

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 11.1	Oushadha Yogas, Pathya in Aatisara, Grahani and Pravahika.	Duration: 1 Hour Pre-Preparation: By the Teacher: 1. Prepare the list of Oushadha Yogas used for Atisara, Grahani and Pravahika 2. Divide the class into 3 groups 3. Assign 1 disease to each group (eg Atisara, Grahani and Pravahika) 4. Provide guidelines to prepare the Ahara Vihara Chart, role play and highlight the important component of communication. 5. Validate the Role Play script prepared by the student Prior to the activity. 6. Ensure the language is simple and easy to understand by the local people. By the Student: 1. Students is expected to understand the disease, Prepare the list of Oushadha Yogas, Ahara Vihara which is indicated for the particular disease assigned to them. 2. Student is expected to prepare the Ahara Vihara chart and the script of the role play and get it validated by the teacher prior to the activity. Activity: 1. Students assemble in groups assigned. 2. Teacher will give an overview of formulations used in Atisara, Grahani and Pravahika along with their rationale. 3. Select the relevant 2 formulations used in Atisara, Grahani and Pravahika, with reference and which are frequently used by practitioners of respective state/ region. 4. Enlist ingredients, indications and explain Practical relevance and role in Samprapti Vighatana.

		5. Group leader present the Ahara Vihara Chart in Atisara, Grahani and Pravahika. 6. Each group executes the role play. Role of Teacher: Facilitate group discussion and provide inputs
NLHT 11.2	Oushadha Yogas and Pathya used in Chhardi.	**Duration:** 1 Hour **Pre-Preparation:** **By the Teacher:** 1. Prepare the list of Oushadha Yogas used for Chhardi. 2. Divide the class into 5 groups 3. Assign 1 type of Chhardi to each group 4. Provide guidelines to prepare the Ahara Vihara Chart, role play and highlight the important component of communication. 5. Validate the Role-Play script prepared by the student Prior to the activity. 6. Ensure the language is simple and easy to understand by the local people. **By the Student:** 1. Students is expected to understand the disease, Oushadha Yogas which is indicated for Chhardi and analyze Samprapti Vighatana. 2. Student is expected to prepare the Ahara Vihara chart and the script of the role play and get it validated by the teacher prior to the activity. **Activity:** 1. Students assemble in groups assigned. 2. Teacher will give an overview of formulations used in Chhardi along with their rationale. 3. Select the relevant 2 formulations used in Chhardi with reference and which are frequently used by practitioners of respective state/ region. 4. Analyze the Samprapti Vighatana in Chhardi. 5. Enlist ingredients, indications and explain Practical relevance. 6. Group leader present the Ahara Vihara Chart in different types of Chhardi. 7. Each group executes the role play. **Role of Teacher:** Facilitate group discussion and provide feedback on participation and analysis.

NLHT 11.3	Oushadha Yoga and Pathya in Vibandha.	**Duration:** 1 Hour **Pre-Preparation:** **By the Teacher:** 1. Prepare the list of Oushadha Yogas used for Vibandha. 2. Divide the class into 5 groups 3. Assign 1 stimulated or hypothesised cases of Vibandha (varying level of severity/different age groups) 4. Provide guidelines to prepare the list of Oushadha Yogas Ahara Vihara Chart, role play and highlight the important component of communication. 5. Validate the Role- play script prepared by the student prior to the activity. 6. Ensure the language is simple and easy to understand by the local people. **By the Student:** 1. Students is expected to understand the disease, enlist Oushadha Yogas which is indicated for the Vibandha and analyze its samprapti Vighatana. 2. Student is expected to prepare the Ahara Vihara chart and the script of the role play and get it validated by the teacher prior to the activity. **Activity:** 1. Students assemble in groups assigned. 2. Teacher will give an overview of formulations used in Vibandha along with their rationale. 3. Select the relevant 2 formulations used in Vibandha with reference and which are frequently used by practitioners of the respective state/ region. 4. Analyze the samprapti Vighatana in Vibandha. 5. Enlist ingredients, indications and explain practical relevance. 6. Group leader present the Ahara Vihara Chart in different types of Vibandha. 7. Each group executes the role play. **Role of Teacher:** Facilitate group discussion and provide feedback on participation and analysis.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**

NLHP 11.1	Physiological basis and composition of various ORT	**Duration:** 1 Hours **Pre-preparation** **By the Teacher:** 1. Teacher informs the topic and group division (Min 6 to 10) 1 week before the class activity. Group 1: Analyse physiological basis of ORT. Group 2: Comparison of various types of ORS. Group 3: Advice and instruct parents on home-based ORS – Role play 2. Validate the role play script before the session. 3. Prepare the checklist for evaluation. **By the Student:** 1. Identify a Question: Physiological basis of ORT, Comparison of various types of ORS and Preparation of Home-based ORS 2. Conduct Background Research: Visit nearby Pharmacy/dispensaries. 3. Formulate hypothesis if needed 4. Plan and Conduct Investigations: Interviewing healthcare professionals about ORTs they use in their practice. Surveys can also be planned in public. 5. Analyze Data: Analyze data from surveys or interviews to understand the physiological basis of ORT, compare various types of ORS and Preparation of Home based ORS **Class Activity:** 1. Students sit in their respective groups 2. Group discussion: 10 mins 3. Communicate findings: Present findings through a report/presentation on the physiological basis of ORT, and compare various types of ORS. 4. Group 3 role play to plan and instruct the parents on home-based ORS. **Teachers' role:** Facilitate group discussion and guide students on resources.
NLHP 11.2	Kriyakrama used in the management(Chikitsa) of Chhardi.	**Duration:** 1 Hour **Pre-preparation:** **By the Teacher:** 1. Identify two Kriyakrama (Procedure based therapy) used in Chhardi 2. Scheduling the demonstration and arranging the patient.

		By the Student: Students are expected to study the concept of Chhardi and its management in detail prior to the Activity. **Activity:** 1. Teacher/therapist demonstrates the Kriyakrama on the patient. 2. Students are expected to observe – A. Pre-procedure specific to the procedure (like Handwashing, Wearing Cap/gloves/mask if needed, Collecting the ingredients and equipment, preparation of medicine, getting consent, fitness certificate if required, counseling the patient and caretaker) B. Procedure (Technique of procedure, communication with the patient and caretaker) C. Post procedure specific to procedure and explain the Do's and Don't to follow. 3. Record the procedure in the record book. 4. Assignment: Write the mode of action/Samprapti Vighatana of the procedure)
NLHP 11.3	Kriyakrama used in the management of Vibandha.	**Duration:** 1 Hour **Pre-preparation:** **By the Teacher:** 1. Identify two Kriyakrama (Procedure based therapy) used in Vibandha 2. Scheduling the demonstration and arranging the patient. By the Student: Students are expected to study the concept of Vibandha and its management in detail prior to the Activity. **Activity:** 1. Teacher/therapist demonstrates the Kriyakrama on the patient. 2. Students are expected to observe – A. Pre-procedure specific to the procedure (like Handwashing, Wearing Cap/gloves/mask if needed, Collecting the ingredients and equipment, preparation of medicine, getting consent, fitness certificate if required, counseling the patient and caretaker) B. Procedure (Technique of procedure, communication with the patient and caretaker) C. Post procedure specific to procedure and explain the Do's and Don't to follow. 3. Record the procedure in the record book. 4. Assignment: Write the mode of action/Samprapti Vighatana of the procedure)

NLHP 11.4	Case Discussion:Mukhapaaka, Gulma, Gudabramsa and Parikartika.	**Duration:** 1 Hour **Preparation /Pre-Requisites** **By the Teacher:** 1. Diving the students in 4 groups and assigning structured case vignette for each group (Mukhapaaka, Gulma, Gudabramsa and Parikartika respectively) one week before the session **By the Student:** 1. Understand the case assigned, diagnose and plan the management 2. Ask for more triggers or direction to solve the case before the session **Activity:** In the clinical classroom: 1. Students discuss the Nidana Panchaka in the allotted group, differential diagnosis, and identify the Samprapti Ghatakas. 2. Plan the management and justify the Samprapti Vighatana 3. Presentation of the case [Each group will present the assigned case] 4. Recording the case in record book.
NLHP 11.5	Signs and symptoms of GI and Liver disorders	**Duration:** 1 Hour **Pre-preparation** **By the Teacher** 1. Preparing the resource material which includes signs and symptoms of GI and liver disorders. 2. Dividing the students in groups and assigning case vignette to each group **By the students (SDL)** 1. Learning the resource material and Identifying signs and symptoms of GI and liver disorders in the case vignette assigned. 2. Identify Dosha and Dhatu involved in GI and liver disorders. 3. Identify signs and symptoms of Vitamin A and D deficiencies. **Activity:** 1. Introduction: Teacher briefly explains the objectives and importance of diagnosing GI and liver disorders in Ayurveda and contemporary medicine. 2. Case Discussion: Each group present their findings briefly. 3. Teacher Facilitate a discussion to referral criteria of Mahashrotogata Vikaras

NLHP 11.6	Case Discussion: Maha Stroto Vikara.	**Duration:** 1 Hour **Preparation /Pre-Requisites** **By the teacher:** 1. Scheduling the case taking and arranging the case (Real Patient / simulated patient/ Case vignette) 2. Make the student understand the OPD/IPD manners during case-taking 3. Preparing the checklist for the concerned activity. **By the student:** 1. Student is expected to come prepared with the content of Nidana Panchaka and Chikitsa Maha Stroto Vikara 2. Rapport building, proper history taking, thorough examination, appropriate Investigation 3. Present their views in clinical classroom discussion **Activity:** **In the clinical classroom:** Students are divided in groups (5-8 members in one group) and sent to OPD/IPD for Bedside - Case taking **Bedside:** Case taking as per the format (in case of real patients) A. Building rapport with patient B. History taking C. Clinical examination **In the clinical classroom:** 1. Students discuss the Nidana Panchaka in the allotted group, differential diagnosis, plan investigations if needed & identify the Samprapti Ghatakas 2. Plan the management and justify the Samprapti Vighatana 3. Presentation of the case [Each group will present one disease or any sub-point of the case] 4. Recording the case in the record book.

Topic 12 Rasa Rakta Rogas [Disorders of blood and cardiovascular system] (LH :3 NLHT: 3 NLHP: 6)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO 2,CO	Describe etio-pathogenesis, clinical features, classification, diagnosis and approach to a child with anaemia.	CK	MK	K	LRI,L& PPT	PM,T-CS	F&S	II	-	LH

3										
CO 2,CO 3	Explain Mritbhakshanajanya Pandu. Enumerate diseases originating from Mritikabhakshana.	CC	MK	K	L&PPT ,L_VC, CD	PM,INT,T-CS	F&S	II	-	LH
CO 2,CO 3	Diagnose and plan Chikitsa for Kamala in children. Define and describe types, etiology, clinical features, diagnosis and management(Chikitsa) of Jaundice in children. Identify referral criteria for cases of Jaundice.	CS	MK	KH	L_VC,LRI,CD	INT,T-CS, C-VC	F&S	II	-	LH
CO 2,CO 3	Analyze Bheda of Pandu with Anemia. Identify referral criteria for cases of anaemia.	CAN	MK	KH	PBL,FC	RS,CHK,PRN	F	II	-	NLHT12.1
CO 2,CO 3	Enlist haemorrhagic diseases in children. Discuss etio-pathogenesis, clinical features and management(Chikitsa) of Haemolytic anemia, Thalassemia Major, Sickle Cell Anemia, Hereditary Spherocytosis. Diagnose and plan management(Chikitsa) of Haemolytic anemia, Thalassemia Major, Sickle cell anaemia, Hereditary spherocytosis.	CS	DK	KH	CBL,FC ,LRI	CHK,PRN, RS	F&S	II	-	NLHT12.2
CO 2,CO 3	Enumerate causes of hepatomegaly and splenomegaly. Analyze concept of Udara Roga with reference to hepatomegaly and splenomegaly.	CAN	DK	KH	BS,DIS	CHK,RS,INT	F	II	-	NLHT12.3
CO 2,CO 3,CO 6	Plan complementary and alternative scope of treatment protocol for cases of Anemia. Communicate the plan of Ahara and Vihara for Pandu to the caregivers. Enlist Oushadha Yogas used in Pandu. Enlist ingredients and indications of at least two Samanya Oushadha Yoga and two Vishesha (condition specific) Yogas used in Pandu Chikitsa and analyze its Samprapti Vighatana.	AFT-RES	MK	SH	CBL,FC ,RP	PRN,CHK, RS	F&S	II	-	NLHP12.1

CO 3,CO 7,CO 8	Perceive two Kriyakrama used in the management of Pandu. Analyse Samprapti Vighatanah in Pandu	PSY-SET	MK	KH	D-BED,D	INT,CHK	F&S	II	-	NLHP12.2
CO 2,CO 3,CO 6	Plan complementary and alternative scope of Ayurveda treatment protocol for the cases of Kamala. Communicate the plan of Ahara and Vihara for Kamala to the caregivers. Enlist Oushadha Yogas used in Kamala. Enlist ingredients and indications of at least two Samanya Oushadha Yoga and two Vishesha (condition specific) Yogas used in Kamala Chikitsa and analyze its Samprapti Vighatana.	AFT-RES	MK	SH	RP,CBL,L&GD	PRN,RS,CHK	F&S	II	-	NLHP12.3
CO 3,CO 7,CO 8	Perceive two Kriyakrama used in the management of Kamala. Analyse Samprapti Vighatana in Kamala	PSY-SET	MK	KH	D,D-BED	INT,CHK	F&S	II	-	NLHP12.4
CO 2,CO 3,CO 4,CO 6	Examine and Plan the treatment for cases of Pandu, Anaemia and Kamala.	PSY-GUD	DK	SH	CBL,D-BED	RS,P-CASE,CHK	F	II	-	NLHP12.5

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 12.1	Bheda and referral criteria of Pandu and Anemia.	**Duration:** 1 Hour **Pre-preparation:** **By the Teacher:** Dividing the students in groups (Min 8 and Max 10 groups) and assigning case vignette to each group (different kind of Pandu and varying severity) 1 week before the activity. **By the students (SDL)**

		1. Identifying the problem and ask for triggers 2. Diagnose the type of Pandu and type of Anaemia 3. Analyze Bheda of Pandu with Anaemia. 4. Identify referral criteria for cases of anaemia 5. Ask for triggers to find the answers prior to the session **Activity:** 1. Introduction: Teacher briefly explains the objectives of the session and activity. 2. Case Discussion: Each group present their findings briefly. 3. Students discuss the new knowledge of comparison and the process of learning 4. Teacher facilitates a discussion to correct misconceptions and reinforce key points.
NLHT 12.2	Haemorrhagic Diseases in children.	**Duration:** 1 Hour **Pre-preparation:** **By the Teacher:** Preparing the resource material (Hemorrhagic Diseases in children) and sharing it to the students (handouts/recorded videos/ppts) 1-2 week prior to the class activity. Dividing the students in groups and assigning case vignettes to each group. **By the students (SDL):** 1. Learning the resource material and understanding the etiopathogenesis, clinical features and management (Chikitsa) of Hemolytic anemia, Thalassemia Major, Sickle Cell Anemia, Hereditary Spherocytosis. 2. Diagnosing the case vignette assigned and planning the management. **Activity:** 1. Introduction: Teacher briefly explain the objectives and list out the hemorrhagic diseases in children. 2. Group discussion: Students discuss in group on assigned case vignette 3. Case Discussion: Each group present their findings briefly and explain the etio-pathogenesis, clinical features and management (Chikitsa) of the case assigned to the group. 4. Teacher Facilitate a discussion to correct misconceptions and reinforce key points.
NLHT 12.3	Udara Roga: hepatomegaly and splenomegaly.	**Duration:** 1 Hour

		Pre-preparation: By the Teacher: Preparing the list of references (Udara Roga, hepatomegaly and splenomegaly) and sharing it with students. **By the students (SDL):** 1. Understanding the concept of Udara Roga, hepatomegaly and splenomegaly from the given references. 2. Carrying the references to the session **Activity:** 1. Introduction: Teacher briefly explain the objectives of the session and activity. 2. Diving the class into group (min 6-8 in one group) 3. Group discussion: Students discuss in groups on the causes of hepatomegaly and splenomegaly and also analyze concept of Udara Roga with reference to hepatomegaly and splenomegaly using the references. 4. Each group present their discussion. 5. Teacher facilitates discussion among different groups to correct misconceptions and reinforce key points.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 12.1	Complementary, alternative treatment protocol, Pathya in Anemia.	**Duration:** 1 Hour **Pre-Preparation:** **By the Teacher:** 1. Prepare the list of Oushadha Yogas used in Pandu 2. Divide the students into 5 groups 3. Assign 1 real case/ stimulated or case vignette (different types of Pandu/Anemia) 4. Provide guidelines to prepare the Ahara Vihara Chart, role play and highlight the important components of communication. 5. Validate the Role Play script prepared by the student Prior to the activity. 6. Ensure the language is simple and easy to understand by the local people. **By the Student:**

		1. Students is expected to understand the disease, Ahara Vihara which is indicated for the particular disease assigned to them. 2. Student is expected to prepare the Ahara Vihara chart and the script of the role play which explains the Ahara Vihara Chart to the parents/caretaker and get it validated by the teacher prior to the activity. 3. Student is expected to enlist the Oushadha Yogas use in Pandu Chikitsa and study the details of any two Samanya & Vishesh Yogas. **Activity:** 1. Students assemble in groups assigned. 2. Teacher explains the Plan complementary and alternative scope of treatment protocol for cases of Anemia. 3. Teacher will give an overview of formulations used in Pandu along with their rationale. 4. Select the relevant 2 formulations used in Pandu with reference and which are frequently used by practitioners of respective state/ region. 5. Enlist ingredients, indications and explain Practical relevance. 6. Discuss the Oushadha Yogas and justify Samprapti Vighatana. 7. Group leader present the Ahara Vihara Chart in different types of Pandu. 8. Each group executes the role play.
NLHP 12.2	Kriyakrama used in management of Pandu	**Duration:** 1 Hour **Pre-preparation:** **By the Teacher:** 1. Identify two Kriyakrama (Procedure-based therapy) used in Pandu. 2. Scheduling the demonstration and arranging the patient. **By the Student:** Students are expected to study the concept of Pandu and its management in detail prior to the Activity. **Activity:** 1. Teacher/therapist demonstrates the Kriyakrama on the patient. 2. Students are expected to observe – A. Pre-procedure specific to the procedure (like Handwashing, Wearing Cap/gloves/mask if needed, Collecting the ingredients and equipment, preparation of medicine, getting the consent, fitness certificate if required, counseling the patient and caretaker)

		B. Procedure (Technique of procedure, communication with the patient and caretaker) C. Post procedure specific to procedure and explain the Do's and Don't to follow. 3. Record the procedure in the record book. 4. Assignment: Write the mode of action/Samprapti Vighatana of the procedure.
NLHP 12.3	Complementary, alternative treatment protocol, Pathya in Kamala.	**Duration:** 1 Hour **Pre-Preparation:** **By the Teacher:** 1. Prepare the list of Oushadha Yogas used in Kamala 2. Divide the students into 3 groups 3. Assign 1 real case/ stimulated or case vignette (varying level of severity) 4. Provide guidelines to prepare the Ahara Vihara Chart, role play and highlight the important components of communication. 5. Validate the Role Play script prepared by the student Prior to the activity. 6. Ensure the language is simple and easy to understand by the local people. **By the Student:** 1. Students is expected to understand the disease, Ahara Vihara which is indicated for the particular disease assigned to them. 2. Student is expected to prepare the Ahara Vihara chart and the script of the role play which explains the Ahara Vihara Chart to the parents/caretaker and get it validated by the teacher prior to the activity. **Activity:** 1. Students assemble in groups assigned. 2. Teacher explains the Plan complementary and alternative scope of treatment protocol for cases of Kamala. 3. Teacher will give an overview of formulations used in Kamala along with their rationale. 4. Select the relevant 2 formulations used in Pandu with reference and which are frequently used by practitioners of respective state/ region. 5. Enlist ingredients, indications and explain Practical relevance. 6. Discuss the Oushadha Yogas and justify Samprapti Vighatana. 7. Group leader present the Ahara Vihara Chart in different types of Kamala. 8. Each group executes the role play.

NLHP 12.4	Kriyakrama used in the management of Kamala.	**Duration:** 1 Hour **Pre-preparation:** **By the Teacher:** 1. Identify two Kriyakrama (Procedure-based therapy) used in Kamala. 2. Scheduling the demonstration and arranging the patient. **By the Student:** Students are expected to study the concept of Kamala and its management in detail prior to the Activity. **Activity:** 1. Teacher/therapist demonstrates the Kriyakrama on the patient. 2. Students are expected to observe – A. Pre-procedure specific to the procedure (like Handwashing, Wearing Cap/gloves/mask if needed, Collecting the ingredients and equipment, preparation of medicine, getting the consent, fitness certificate if required, counseling the patient and caretaker) B. Procedure (Technique of procedure, communication with the patient and caretaker) C. Post procedure specific to procedure and explain the Do's and Don't to follow. 3. Record the procedure in the record book. 4. Assignment: Write the mode of action/Samprapti Vighatana of the procedure.
NLHP 12.5	Case Discussion: Pandu, Anaemia and Kamala.	**Duration**: 2 Hour **Preparation /Pre-Requisites:** **By the Teacher:** 1. Scheduling the case taking and arranging the cases of Pandu, Anemia and Kamala. (Real Patient / simulated patient/ Case Vignette) 2. Preparing the checklist for the concerned activity. **By the student:** 1. Student is expected to come prepared with the content of Nidana Panchaka and Chikitsa of Pandu and Kamala. 2. Rapport building, proper history taking, thorough examination, appropriate Investigation **Activity:** **Clinical classroom:** Students are divided in groups (5-8 members in one group) and sent to OPD/IPD for Bedside - Case taking

		Bedside (in case of real case): Case taking as per the format 1. Building rapport with patient 2. History taking 3. Clinical examination **In clinical classroom:** 1. Students discuss the Nidana Panchaka in the allotted group, differential diagnosis, plan investigations if needed & identify the Samprapti Ghatakas 2. Plan the management and justify the Samprapti Vighatana 3. Presentation of the case [Each group will present any one sub point of the case] 4. ROLE-PLAY – Explain the care plan, Ahara vihara & prognosis to parent. 5. Recording the case in record book. **Teacher's role**: Teacher evaluates students' performance based on checklist/rating scale. **Checklist: Yes/No** 1. Rapport building established 2. Explains the history and symptoms in sequence of disease Pandu, Anemia and Kamala accurately. 3. Explains local and systemic clinical examination performed. 4. Identifies the Nidana Panchaka accurately and discuss differential diagnosis. 5. Identifies the Samprapti Ghatakas in disease Pandu, Anemia and Kamala as per the allotment of respective groups. 6. Plan the management and Justifies Samprapti Vighatana. 7. Explain care plan, Ahara vihara & prognosis to parent. 8. Shows active collaboration in group and justifies the queries raised. 9. Language is simple and easy to understand by the local people.

Topic 13 Antahsravee Granthi Rogas (Disorders of Endocrine System) (LH :3 NLHT: 2 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO 2,CO 3,CO 6	Enlist Thyroid dysfunctions. Define Hyperthyroidism, Hashimoto's Thyroiditis in children. Analyze Samprapti in Thyroid dysfunction and plan Chikitsa. Diagnose and manage Hypothyroidism.	CE	MK	KH	LRI,L& PPT ,L&GD	T-CS,QZ , C-VC	F&S	II	-	LH

CO 2,CO 3	Interpret and explain Neonatal and Childhood Thyroid screening report. Identify referral criteria for the cases of Thyroid dysfunction	CC	MK	K	TUT,L &PPT ,LRI	T-CS,SBA, O-QZ	F&S	II	-	LH
CO 2,CO 3,CO 6	Explain Sahaja Prameha. Describe etio-pathogenesis, clinical features, diagnosis, complications ,management and referral criteria of Type-1 Diabetes mellitus. Analyze the concept of Prameha with reference to Diabetes.	CAN	MK	KH	DIS,BS, L&PPT	CR-W,SBA ,T-CS	F&S	II	-	LH
CO 2,CO 3,CO 6	Enlist ingredients and indications of at least two Samanya Oushadha Yoga and two Vishesha (condition-specific) Yogas used for T1DM and analyse the Samprapti Vigatana. Prescribe and explain Ahara - Vihara for Thyroid Dysfunctions and T1DM.	CS	MK	KH	BS,L& GD,ML	CL-PR,O-QZ,WP	F&S	II	-	LH
CO 2,CO 3,CO 4,CO 6	Plan Chikitsa for Diabetes Mellitus (Prameha), glycaemic control and analyze Samprapti Vagatana. Identify referral criteria for the cases of Diabetes Mellitus. Prescribe and explain Ahara- Vihara for T1DM.	CS	MK	KH	PBL,FC ,CBL	CHK, C-VC,SP	F&S	II	-	NLHT13.1
CO 2,CO 3,CO 7	Enlist and perceive any two Kriyakrama used in the management of T1DM . Analyse Samprapti Vighatana	PSY-SET	MK	KH	D-M,D,PT	QZ ,INT,CHK	F&S	II	-	NLHP13.1
CO 1,CO 2,CO 3,CO 6	Predict the case of precocious and delayed puberty. Identify deviations in growth and plan appropriate management.	CAP	NK	KH	FC,PER ,SDL	QZ ,CHK,RS	F&S	II	-	NLHT13.2
Non Lecture Hour Theory										

S.No	Name of Activity	Description of Theory Activity
NLHT 13.1	Diabetes Mellitus (Prameha)	**Duration:** 1 hour **Pre-Preparation:** **By the Teacher:** 1. Preparation of Case Vignette (different age group/different glycemic levels/) 2. Divide the Class into groups. 3. Assign one case to each group one week prior to the class activity. **By the Students:** Student is expected to study Diabetes Mellitus & glycemic control measures Ahara Vihara, referral criteria, by referring classical texts or by conduct a survey before the session. **Activity:** 1. Students assemble in assigned group 2. Group Discussion on the assigned topic. 3. Students are expected to present:- A. Chikitsa Sutra if any B. Shamana Protocol and analyze Samprapti Vighatana if any C. Prescribe dose a/c to age D. Shodana protocol if needed and justify the indication. E. Satvavajaya measures if any F. Glycemic control measures G. Prescribe a diet regimen H. follow-up plan I. Criteria to refer **Role of the Teacher:** Facilitate group discussion and summarize the key points.
NLHT 13.2	Precocious and Delayed Puberty	**Duration:** 1 Hour **Pre-Preparation** **By the Teacher:** Dividing the students in groups (Min 8 and Max 10 groups) and assigning the topic one week before the activity. **By the Students:** Students are expected to study puberty & growth deviations before coming to class **Activity:**

		1. Students are divided into three groups (precocious, delayed, and deviated growth). 2. Provide one case to each group 3. Students are expected to identify – a. Types of puberty b. Chronological development of signs & symptoms during puberty. d. Current manifestations/ symptoms e. Familial history if any f. Principle of growth and development g. Growth patterns in the charts h. Causative factors for deviated growth if any **Teacher's role:** Teacher asses using a checklist. **Checklist:** Yes/ No 1. Identifies Puberty types accurately 3. Mentions Chronological development of puberty symptoms accurately 4. Explains current manifestations/ symptoms 5. Mentions appropriate Causative factors 6. Mentions familial history 7. Analysis of growth and development 8. Explains the growth pattern using the chart.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 13.1	KriyaKrama in T1DM	**Duration:** 2 hours **Pre-preparation:** **By the Teacher:** 1. Identifying Kriyakrama used in T1DM 2. Scheduling the demonstration and arranging the patient. By the Student: Students are expected to study the disease and its management in detail prior to the activity. **Activity:**

		1. Teacher/therapist demonstrates Kriyakrama on the patient. 2. Students are expected to observe – A. Pre-procedure (Handwashing, Wearing Cap/gloves/mask, Collecting the ingredients and equipment's, preparation of medicine, getting the consent, fitness certificate if required, counselling the patient and caretaker) B. Procedure (Technique of procedure, communication with the patient and caretaker) C. Post procedure (Explaining the Do's and Don't to follow) 3. Assignment: Students are asked to write the mode of action/Samprapti Vighatana of the procedure)

Topic 14 Mutravaha Sroto Rogas (Disorders of Genito urinary system) (LH :3 NLHT: 2 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO 2,CO 3,CO 6	Diagnose and plan the Chikitsa of Mutrakrichra in children. Diagnose and plan the management of Urinary Tract infection in children. Describe the etiopathogenesis, clinical features, diagnosis, complications and management of Glomerular Nephritis in children.	CE	MK	KH	L&PPT ,DIS,LR I	PM,T-CS, C-VC	F&S	III	-	LH
CO 2,CO 3,CO 6	Explain the approach to the case of Proteinuria and Hematuria. Describe the etio-pathogenesis, clinical features, diagnosis complications and management of Chronic Renal Failure in Children. Describe the etio-pathogenesis, clinical features, diagnosis complications and management of Nephrotic Syndrome in Children	CC	MK	K	L&PPT ,DIS,LR I	PM, C-VC,T-CS	F&S	III	-	LH
CO 2,CO 3	Identify referral criteria for Proteinuria, Hematuria. Identify referral criteria for Genitourinary disorder	CK	MK	K	EDU,F C,PBL	C-VC,QZ ,O-GAME	F&S	III	H-SH	NLHT14.1
CO 2,CO	Enlist the ingredients and indications of at least two Samanya Oushadha Yoga and two Vishesha (condition specific) Yogas	CE	MK	KH	L_VC,D IS,L&P	C-VC,SBA ,T-CS	F&S	III	H-SH	LH

3,CO 6	used in Genito Urinary disease and Analyse the Samprapti Vigatana. Diagnose Niruddha Praksha/Niruddha Mani in children and plan the Chikitsa. Diagnose and Plan the management for Phimosis.				PT					
CO 2,CO 3,CO 6	Formulate complementary and alternative scope of Ayurveda treatment protocol for the cases of Mutra Vaha Sroto Vikara. Prescribe and Explain Ahara and Vihara for Genitourinary disease	CS	MK	KH	TBL,PBL,L&GD	P-PS,SBA,CBA	F&S	III	-	NLHT14.2
CO 2,CO 3,CO 4	Examine status of Kelda, Agni, Koshta in a case of Mutra and Shukra Vaha Sroto Dusti.	PSY-GUD	MK	SH	D-BED,PT	P-PRF,CHK,P-CASE	F&S	III	-	NLHP14.1
CO 3,CO 4,CO 7	Perceive two Kriyakrama used in the management of Mutra Vaha Sroto Vikara. Analyze Samprapti Vighatana	PSY-SET	MK	KH	D-M,D	CHK,INT,QZ	F&S	III	-	NLHP14.2

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 14.1	Refererral criteria of Genito urinary disorders	**Duration:** 1 hour **Pre-Preparation:** **By the Teacher:** 1. Dividing the class into four groups one week prior to the activity. Guide the students about references 2. Preparation of Case Vignette 3. Assign one/two cases to each group ((Proteinuria, Haematuria, Genito urinary, Phimosis) one week prior to the class activity **By the Student:** Students are expected to study available literature prior to class and understand the case assigned to them.

		Activity: 1. Facilitator opens discussion 2. Students are expected to A. Explain the history and symptoms in the case. B. Mention the examination findings. C. Interpret the investigation findings. D. Diagnose the case and its subtype. E. Explain the referral criteria and justify the reason.
NLHT 14.2	Scope of treatment & ahara-vihara plan in Mutra vaha Sroto Vikara	**Duration:** 1 hour **Pre-Preparation:** **By the Teacher:** Dividing the class into groups (different Mutra Vaha Sroto Vikara)one week prior to the activity and assigning them a problem. Guide the students about references **By the Student:** 1. Students are expected to study available literature regarding Mootra Vaha Sroto Vikara. 2. Understand the case and plan Ahara and Vihara for the case **Activity:** 1. Teacher explains the complementary and alternative scope of Ayurveda treatment protocol for the cases of Mutra Vaha Sroto Vikara. 2. Students are expected to diagnose the case and present the Ahara Vihara chart of given case. 3. Analyse the chart and discuss the complementary and alternative scope of Ayurveda treatment protocol.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 14.1	Examination of kleda agni kosta in mutra and shukra vaha srotas	**Duration:** 1 Hour **Pre Preparation** **By The Teacher** 1. Introduce students about the importance of Agni, Kosta, Kleda examination in Mutra Sukra Vaha

		Srotas through handouts. 2. Divide students in groups with 10-15 students in a team 3. Provide a real case/case vignette to each group 3. Prepare questionnaire to assess Kelda, Agni, Koshta. **By The Student:** Student should understand the questionnaire. **Activity:** 1. Students gather in group. 2. Bedside (real case) A. Build rapport B. Examine the child. C. Assess Agni (Krura, Madhyama, Mrudu, Sama) D. Assess Kleda parameter in all types of Kostas (Krura ,Madhyama ,Mrudu, Sama) Clinical Classroom: Discuss the findings and difficulties faced in assessment.
NLHP 14.2	Kriya karma in Mutra Vaha Sroto Vikara	**Duration:** 1 hour **Pre-preparation:** **By the Teacher:** 1. Identifying Kriyakrama (procedure-based therapy) used in Mutra Vaha Sroto Vikara 2. Scheduling the demonstration and arranging the patient/ model By the Student: Students are expected to study the disease and its management in detail prior to the Activity. **Activity:** 1. Teacher/therapist demonstrates the Kriyakrama on the patient. 2. Students are expected to observe – A. Pre-procedure (Handwashing, Wearing Cap/gloves/mask, Collecting the ingredients and equipment, preparation of medicine, getting consent, fitness certificate if required, counseling the patient and caretaker) B. Procedure (Technique of procedure, communication with the patient and caretaker) C. Post-procedure (Explaining the Do's and Don't to follow) D. Assignment: Students are asked to write the mode of action/Samprapti Vigatana of the procedure)

Topic 15 Sandhi Rogas (Rheumatological Disorders) (LH :3 NLHT: 2 NLHP: 2)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO 2,CO 3,CO 6	Enumerate Rheumatological problems in children. Diagnose and plan Chikitsa of Amavata.	CE	MK	KH	L_VC,L &PPT ,X-Ray	T-CS, C-VC,CBA	F&S	III	-	LH
CO 2,CO 3,CO 6	Diagnose and plan Chikitsa of Sandhigata Vata.	CE	MK	KH	CD,X-Ray,L&GD	C-VC,T-CS,SBA	F&S	III	-	LH
CO 2,CO 3,CO 6	Diagnose and plan Chikitsa of Vatarakta. Enlist ingredients and indications of at least two Samanya Oushadha Yoga and two Vishesha (condition specific) Yogas used for Rheumatological disorders and Analyse the Samprapti Vigatana.	CE	MK	KH	L&PPT ,DIS,LRI	C-VC,T-CS	F&S	III	-	LH
CO 2,CO 3,CO 6	Identify referral criteria in Rheumatological disorders. Prescribe and explain Ahara-Vihara in Rheumatological disorders.	CS	MK	KH	CD,PBL ,CBL	RS,Mini-CEX,CHK	F&S	III	-	NLHT15.1
CO 2,CO 3,CO 6	Formulate integrated treatment protocol for the cases of Rheumatological disorders	CS	DK	KH	FC,BS, TBL	RS,SBA,PRN	F&S	III	-	NLHT15.2
CO 3,CO 7,CO 8	Perceive two Kriyakrama used in the management of Rheumatological disorders. Analyse Samprapti Vighatana	PSY-SET	MK	KH	D,D-M,PT	QZ ,CHK,INT	F&S	III	-	NLHP15.1

CO 2,CO 3,CO 4,CO 7	Examine, diagnose and plan the management of child with Amavata.	PSY-GUD	MK	SH	D-BED, CBL	P-CASE,CHK,Mini-CEX	F&S	III	-	NLHP15.2
CO 2,CO 3,CO 4	Demonstarte the case history of Rheumatology and explain nidana panchaka	PSY-GUD	MK	SH	CBL,CD,D-BED	P-CASE,CHK,Mini-CEX	F&S	III	-	NLHP15.3

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 15.1	Referral criteria & Pathya in Rheumatological disorders.	**Duration :** 1 hour **Pre-Preparation:** **By the Teacher:** 1. Dividing the class into groups one week prior to the activity. Guide the students about references 2. Preparation of Case Vignette 3. Assign one/two case to each group one week prior to the class activity **By the Student:** Students are expected to study available literature prior to class. **Activity:** Students are expected to- 1. Diagnose the case 2. Interpret the investigations 3. Explain referral criteria 4. Explain Ahara for all stages of the disease if any. 5. Explain vihara for all stages of the disease if any.
NLHT 15.2	Integrated treatment for Rheumatological Disorders	**Duration:** 1 hour **Pre-Preparation:** **By the Teacher:**

		1. Dividing the class into groups one week prior to the activity. 2. Provide references on the integrated approach through PPT/Handouts/pre-recorded videos. **By the Student:** 1. Students are expected to study literature prior to class. 2. Collect and study scientific articles on the topic. **Activity:** Students are expected to- 1. Discuss the scope of Ayurveda and complementary medicine in the treatment of Sandhigata Roga in children. 2. Discuss recent advances in Ayurveda & other systems 3. Present new research points available from the journals and analyse them. 4. Build a stage-wise protocol (mind mapping) 5. Discuss the advantages and limitations of the treatments 6. Discuss the availability of medicine and duration of treatment aspects in all system 7. Each group present their findings. 8. Teacher summarises the key points on the integrated approach.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 15.1	Kriya Krama in Rheumatological disorders	**Duration:** 1 Hour **Pre-preparation:** **By the Teacher:** 1. Identifying Kriyakrama used in Rheumatological disorders 2. Scheduling the demonstration and arranging the patient. By the Student: Students are expected to study the disease and its management in detail prior to the Activity. **Activity:** 1. Teacher/therapist demonstrates the kriyakrama on the patient. 2. Students are expected to observe – A. Pre-procedure (Handwashing, Wearing Cap/gloves/mask, Collecting the ingredients and equipment, preparation of medicine, getting consent, fitness certificate if required, counseling the patient and

		caretaker) B. Procedure (Technique of procedure, communication with the patient and caretaker) C. Post-procedure (Explaining the Do's and Don't to follow) 3. Assignment: Students are asked to write the mode of action/Samprapti Vigatana of the procedure)
NLHP 15.2	Case Discussion: Amavata	**Duration:** 3 Hours **Pre-Preparation:** **By the Teacher:** Divide the class into groups (5-8/group) assign 1/2 real case/simulated case/case vignette (different presentation of Amavata) **By the Student:** Student is expected come prepared with the knowledge of Nidanapanchaka and Chikitsa of diseases Amavata. **Activity:** Student gather in group and build the case **Bedside (in real case)** 1. Rapport building 2. History taking 3. Clinical Examination (General & Joint Examination) **Clinical classroom:** 1. Students will discuss Samprapti Ghatakas of given case of Amavata. 2. Plan the management and justify Samprapti Vigatana 3. Students are asked to present different cases/ parts of a case (e.g. History, Examination, Differential Diagnosis, Investigations, Management) 4. Teacher has to facilitate discussion to clear doubts of students. 5. Explain the care plan, Ahara and Vihara to parent/ guardian with a help of Role Play 6. Students will record the case in record book. **Role of a teacher:** Facilitate group discussion and evaluate the student using a checklist. **Checklist**: Yes/No 1. Rapport building established 2. Record history precisely. 3. Performs/explain General and specific examination 4. Interprets investigation report accurately. 5. Justifies differential diagnosis

		6. Accurately diagnose the case and explain the Avastha 7. Plans the treatment protocol and justifies the Samprapti Vigatana 8. Plans the Ahara Vihara efficiently. 9. Explains the prognosis of diseases and treatment effectively.
NLHP 15.3	Nidanapnachaka of Rheumatological disorders	**Duration:** 1 Hour **Pre-preparation** **By the teacher:** 1. Scheduling the case taking and arranging the case (Real Patient / simulated patient/ Hypothesised Case) 2. Make the student understand the OPD/IPD manners during case-taking **By the student:** 1. Students are expected to come prepared with history taking & the content of Nidana Panchaka of Rheumatological disorders 2. Rapport building, proper history taking, Nidana Panchaka finding in the given patient 3. Present their views in clinical classroom discussion **Activity:** In clinical classroom: Students are divided in groups (5-8 members in one group) and sent to OPD/IPD for Bedside - Case taking **Bedside:** (in real case) 1. Building rapport with patient 2. History taking **In the clinical classroom** 1. Students discuss the case in group 2. Frame the Nidana Panchaka and Samprapti Gatakas. 3. Present the history, examination finding and interpret the investigation reports. 3. Presents the Nidana Panchaka and Samprapti Gatakas to the class. 4. Teachers summarise the key points.
Topic 16 Twak Rogas (Dermatological Disorders) (LH :3 NLHT: 2 NLHP: 3)		

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO 2,CO 3,CO 6	Enumerate Twak Rogas in Children. Diagnose and plan Chikitsa for Kushta.	CE	MK	KH	L&PPT ,L_VC, TUT	PM, C-VC,T-CS	F&S	III	V-AT	LH
CO 2,CO 3,CO 6	Diagnose and plan Chikitsa for Visarpa and Charmadala.	CE	MK	KH	L_VC,L &PPT ,TUT	PM,T-CS, C-VC	F&S	III	-	LH
CO 2,CO 3,CO 4,CO 6	Examine, diagnose and plan the management of Kusta/ Charmadala/ Visarpa. Identify the referral Criteria for Twak Rogas	PSY-GUD	MK	SH	SIM,CB L,D-BED	P-CASE,CH K	F&S	III	-	NLHP16.1
CO 2,CO 3,CO 6	Diagnose and plan Chikitsa for Arumshika.	CE	MK	KH	DIS,L& PPT	C-VC,PM	F&S	III	-	NLHT16.1
CO 2,CO 4,CO 6	Communicate the plan of Ahara and Vihara for Twak Rogas to caregivers.	AFT-RES	MK	SH	RP,SIM	CHK,RS,P-RP	F&S	III	-	NLHT16.2
CO 2,CO 3,CO 6	Describe etiopathogenesis, clinical features, complications and management of Scabies and Eczema.	CK	MK	K	ML,L& PPT ,TUT	C-VC,T-CS	F&S	III	-	LH
CO	Diagnose and plan the management of Erythema Toxicum	CE	DK	KH	ML,L_	C-VC,O-G	F&S	III	-	LH

2,CO 3,CO 6	Neonatorum, Adenoma Sebaceum, Cutis Marmorata and Seborrheic Dermatitis.				VC,L& PPT	AME,T-CS				
CO 2,CO 3	Enlist Oushadha Yoga used in the Twak Roga. Enlist ingredients and indications of at least two Samanya Oushadha Yoga and two Vishesha (condition-specific) Oushadha Yoga used in Twak Roga and analyze Samprapthi Vighatana.	CK	MK	KH	TBL,L &GD,D IS	INT,P-ID,WP	F&S	III	-	NLHT16.3
CO 4,CO 7,CO 8	Perceive two Kriyakrama (Procedure based therapy) used in the management of Twak Roga and analyze the Samprapti Vighatana.	PSY-SET	MK	KH	D,D-BED	INT,CHK	F&S	III	-	NLHP16.2

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 16.1	Case Discussion: Arumshika	**Duration:** 20 Minutes **Pre-preparation** **By the Teacher:** Introduces the topic covering the prevalence of the disease Arumshika in children and its Nidana Panchaka and Chikitsa [PPT/ Handouts or Video]. **By the Student:** Expected to come prepared with a detailed Knowledge of Arumshika. **Activity:** 1. The teacher will lead the discussion, incorporating key points and utilizing images, videos or a Power Point presentation. 2. Discuss on Different presentations of Arumshika in children 3. Discuss Differential diagnosis of the clinical presentation 4. Twak Pareeksha & Clinical examination. 5. Final diagnosis of Arumshika 6. Management and different medications and their application **Role of teacher:** Facilitate the discussion with required inputs.

		Students are evaluated using Clinical Video Cases.
NLHT 16.2	Pathya in Twak Roga.	**Duration:** 40 Minutes **Pre-preparation:** **By the teacher:** Divide the group and assign the topic/Case one week before the session **By the Student:** 1. Frame the Ahara and Vihara Chart for Twak Roga 2. Writes the script and validate it before the class Script contains A. Name of the student: Role played by the student B. Script dialogues C. Using of Manikins/task trainers wherever necessary **Activity**: (Clinical classroom/class) 1. Faculty introduce the topic 2. Groups execute the role play 3. Discussions on points to be highlighted A. Ahara in different Twak Roga B. Vihara in different Twak Roga
NLHT 16.3	Oushadha Yogas used in Twak Roga	**Duration:** 1 Hour **Pre-Preparation:** **By the teacher:** 1. The teacher will give an overview of the formulations used in Twak Roga 1 week before the session. 2. Select any two relevant formulations used in Twak Roga, which are referenced in Ayurveda Classical Texts and are frequently used by practitioners of the respective state/ region. **By the student:** 1. Students are expected to come with knowledge of the Management of Twak Roga. 2. Collect the references of Oushadha Yoga used in the Twak Roga from various Samhitas. **Activity:** 1. Students enlist Oushadha Yoga used in the Twak Roga from various Samhitas

		2. Enlist two Samanya Oushadha Yoga and two Vishesha (condition-specific) Oushadha Yoga used in Twak Roga by the teacher 3. Explain the Sloka word-by-word and highlight key terms. 4. Discuss the conceptual meaning and interpretation. 5. Explain Practical relevance. 6. Encourage questions and participant involvement. 7. Analyze the role of formulation in Samprati Vighatana 8. Analyze the practical application of the formulations in multiple disease conditions. 9. Cross-reference with related Sloka or commentaries. **Role of Teacher:** Ensure proper pronunciation and understanding of appropriate meaning.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 16.1	Case Discussion: Kusta/ Charmadala/ Visarpa.	**Duration:** 2 Hours **Pre - Preparation:** **By the teacher:** 1. Schedule and ensure the availability of real/ simulated cases/ Case vignettes of Kusta/ Charmadala/ Visarpa 2. Students are divided into groups (5-8 members in one group) and assigned a case. 3. Make the student understand the OPD/IPD manners during case-taking 4. Preparing the checklist for the concerned activity. By the student: The student is expected to come prepared with the knowledge of Nidanapanchaka and Chikitsa of diseases Kusta/ Charmadala/ Visarpa. **Activity** In the clinical classroom: Assign one case to each group Kusta/ Charmadala/ Visarpa (real case/ simulated case) **Bedside:** Case taking as per the protocol (in real case) A. Rapport building B. History taking C. Clinical Examination (General & Skin and integumentary system)

		Back in the clinical classroom: 1. Students will discuss Samprapti Ghatakas of the given case of Kusta/ Charmadala/ Visarpa. 2. Students are asked to present different cases/ parts of a case (e.g. History, Examination, Differential Diagnosis, Investigations, Management) 3. Plan the management and justify Samprapti Vighatana 4. Role play - Explain the care plan, Ahara-Vihara and prognosis to the parent/ guardian 5. Teacher opens the discussion on referral Criteria for Twak Rogas 6. Record the case in the record book.
NLHP 16.2	Kriyakramas (Procedure-based therapy) in Twak Roga.	**Duration:** 1 Hour **Pre-Preparation:** **By the Teacher:** 1. Identify two Kriyakrama (procedure-based therapy) used in Twak Roga that are referred to in Ayurveda Classical Texts and are frequently used by practitioners of the respective state/ region. 2. Scheduling the demonstration and arranging the patient/ manikin. By the Student: Students are expected to study Twak Roga and its management in detail before the Activity. **Activity:** 1. The teacher/therapist demonstrates the kriyakrama on the patient/manikin. 2. Students are expected to observe – A. Pre-procedure specific to the procedure (like Handwashing, Wearing Cap/gloves/mask if needed, Collecting the ingredients and equipment, preparation of medicine, getting consent, fitness certificate if required, counselling the patient and caretaker) B. Procedure (Technique of procedure, communication with the patient and caretaker) C. Post-procedure specific to procedure and explain the Do's and Don't to follow. 3. Discuss the mode of action (Samprapti Vighatana) of the procedure 4. Record the procedure.

Topic 17 Sira Snayu Rogas (Nervous system disorders) (LH :7 NLHT: 3 NLHP: 9)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3

CO 2,CO 3,CO 6	Explain Nidana Lakshana & Chikitsa of Jalasheershaka. Describe etiopathogenesis, classification, clinical features, complications and management of Hydrocephalus.	CC	MK	K	L_VC,LRI,L&PPT	T-CS, C-VC,INT	F&S	III	-	LH
CO 2,CO 3,CO 4	Diagnose and plan the management for a case of Jalasheershaka (Hydrocephalus).	CE	MK	KH	SIM,D, CBL	CHK,RS,P-CASE,SP	F&S	III	-	NLHT17.1
CO 2,CO 3,CO 6	Diagnose and plan Chikitsa of Apasmara.	CE	MK	KH	CD,L&GD,L_VC	C-VC,T-CS	F&S	III	-	LH
CO 2,CO 3	Analyse the concept of Skanda Apasmara with epilepsy.	CAN	NK	KH	L&GD, BS,DIS	INT,CR-RED,CR-W	F	III	-	LH
CO 2,CO 3	Describe etiopathogenesis, clinical features, complications and management of Febrile Seizures in children. Define Epilepsy. Describe the pathogenesis, types, clinical features, diagnosis and management of Epilepsy in children.	CK	MK	K	L&PPT ,L_VC, LRI	T-CS, C-VC	F&S	III	-	LH
CO 2,CO 3,CO 4,CO 7	Examine and plan the management for a case of Apasmara.	PSY-GUD	MK	SH	D-BED, CBL,SIM	P-CASE,CHK,SP	F&S	III	-	NLHP17.1
CO 2,CO 3	Enumerate the causes of floppiness in an infant and discuss the differential diagnosis and management.	CC	DK	K	L_VC,BS,L&GD	INT,T-CS	F&S	III	-	LH

CO 2,CO 3	Describe etiopathogenesis, clinical features and management of Ataxia in children.	CK	MK	K	L_VC,L &PPT	C-VC,PM, T-CS	F&S	III	-	LH
CO 2,CO 3	Define Cerebral Palsy. Describe the etiology, types, clinical features, diagnosis and management of a child with Cerebral Palsy.	CK	MK	K	L&PPT ,TUT,L _VC	C-VC,T-C S,O-GAME	F&S	III	-	LH
CO 2,CO 3,CO 4,CO 7	Examine and plan the management for a case of Cerebral palsy.	PSY-GUD	MK	SH	D-BED, CBL,SI M	CHK,SP,P-CASE	F&S	III	-	NLHP17.2
CO 2,CO 3	Describe the classification, clinical features and management of Communication Disorders.	CK	MK	K	L&PPT ,TUT,L _VC	T-CS,PM, C-VC	F&S	III	-	LH
CO 2,CO 3,CO 4,CO 7	Diagnose and plan the management for a case of Communication Disorders.	CE	MK	SH	CBL,D-BED,SI M	SP,P-PS,C HK,RS	F&S	III	-	NLHT17.2
CO 4,CO 6,CO 8	Communicate the plan of Ahara and Vihara for Neurological Disorders to the caregivers.	AFT-RES	MK	SH	SIM,RP	RS,P-RP,CHK	F&S	III	-	NLHT17.3
CO 2,CO 3	Enlist the Oushadha Yogas used in Neurological Disorders. Enlist the ingredients and indications of at least two Samanya Oushadha Yoga and two Vishesha (condition-specific) Yogas used for Neurological Disorders and analyze their role in Samprapti Vighatana, Identify the referral criteria in Neurological	CK	MK	K	L&GD, BS,DIS	O-GAME,I NT,WP	F&S	III	-	NLHT17.4

	Disorders.									
CO 2,CO 3,CO 7,CO 8	Perceive two Kriyakramas (Procedure-based therapy) used in the management of Neurological Disorders in children and analyse the Samprapti Vighatana.	PSY-SET	MK	KH	D-M,D, D-BED	DOPS,DOPS	F&S	III	-	NLHP17.3

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 17.1	Jalasheershaka (Hydrocephalus)	**Pre-preparation** **By the Teacher:** 1. Schedule and give simulated cases/case vignettes of Jalasheershaka (Hydrocephalus). 2. Students are divided into groups (5-8 members in one group) and assign cases with different presentations of Jalasheershaka (Hydrocephalus) to each group **By the Student:** The student is expected to come prepared with the knowledge of etiopathology, types, clinical features and management of the disease Jalasheershaka (Hydrocephalus). **Activity in the classroom: Group Discussion - 1 hour** 1. Teacher gives a brief introduction of Jalasheershaka (Hydrocephalus) 2. Students gather in assigned groups 3. Develop the case as per the protocol with a complete history and clinical examination 4. Discuss Samprapti Ghatakas of a given case of Jalasheershaka 5. Plan the management and with Samprapti Vighatana **Presentation - 1 hour** 1. Students are asked to present different cases/ parts of a case (e.g. History, Examination, Differential Diagnosis, Investigations, Management) 2. Explain the management plan and justify the Samprapti Vigatana. 3. ROLE-PLAY - Explain the care plan, Ahara-Vihara, and prognosis to the parent/ guardian 4. Record the case in the record book. 5. Teacher summarizes the key points on the management of Jalasheershaka (Hydrocephalus).

NLHT 17.2	Communication Disorders.	**Duration:** 1 Hour **Pre-preparation** **By the Teacher:** 1. Schedule and give simulated cases/case vignette of Communication Disorder. 2. Students are divided into groups (5-8 members in one group) and assign cases with different presentations of Communication Disorder to each group **By the Student:** The student is expected to come prepared with the knowledge of etiopathology, types, clinical features and management of disease Communication Disorders. **Activity in the classroom** 1. Students gather in assigned groups 2. Develop the case as per the protocol with a complete history and clinical examination 3. Discuss Samprapti Ghatakas of a given case of Communication Disorder 4. Plan the management and with Samprapti Vighatana 5. Each group present different cases/ parts of a case (e.g. History, Examination, Differential Diagnosis, Investigations, Management) 6. Explain the management plan and justify the Samprapti Vigatana. 7. Explain the care plan, Ahara-Vihara, and prognosis to the parent/ guardian 8. Record the case in the record book.
NLHT 17.3	Pathya in Neurological Disorders.	**Duration:** 1 Hour **Pre-preparation:** **By the teacher:** Divide the students into groups and assign the topic one week before the session **By the Student:** 1. Frame the Ahara and Vihara Chart for Neurological Disorders. 2. Writes the script and validate it before the class Script contains A. Name of the student: Role played by the student B. Script dialogues (in local langugae/ esay to understand dialogues) C. Using of Manikins/task trainers wherever necessary **Activity:** (Clinical classroom/class) 1. Faculty introduce the topic

		2. Groups execute the role play 3. Discussions on points to be highlighted A. Ahara in different Neurological Disorders B. Vihara in different Neurological Disorders.
NLHT 17.4	Oushadha Yogas used in Neurological Disorders.	**Duration:** 1 Hour **Pre-Preparation:** **By the teacher:** 1. The teacher will give an overview of formulations used in Neurological Disorders along with their rationale. 2. Select the relevant 2 formulations used in Neurological Disorders, which have a reference in Ayurveda Classical Texts and are frequently used by practitioners of the respective state/ region. **By the student:** 1. Students are expected to come with the knowledge of Management of Neurological Disorders. 2. Collect the references of Oushadha Yogas used in Neurological Disorders **Activity:** 1. Enlist the Oushadha Yogas used in Neurological Disorders by the students mentioned in different Samhitas 2. Enlist the two Samanya Oushadha Yoga and two Vishesha (condition-specific) Yogas used for Neurological Disorders by the teacher 3. Explain the Sloka word-by-word and highlight key terms. 4. Discuss the conceptual meaning and interpretation. 5. Explain Practical relevance. 6. Encourage questions and participant involvement. 7. Analyze the Samprapti Vighatana 8. Analyze the practical application of the formulations in multiple disease conditions. 9. Discuss the referral criteria in Neurological Disorders.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**

NLHP 17.1	Case Discussion: Apasmara.	**Duration:** 3 Hours **Preparation:** **By the teacher:** 1. Schedule and ensure the availability of real/simulated case/case vignette of Apasmara (different tyeps of Apasmara) 2. Students are divided into groups (5-8 members in one group) and assigned a case. 3. Make the student understand the OPD/IPD manners during case-taking **By the student:** The student is expected to come prepared with the knowledge of Nidanapanchaka and Chikitsa of the disease Apasmara. **Activity** In the clinical classroom: Assign 1/2 real case/ simulated case/Case Vignette of Apasmara to each group **Bedside:** Case taking as per the protocol(real case) A. Rapport building B. History taking C. Clinical Examination **Back in the clinical classroom:** 1. Students will discuss Samprapti Ghatakas of a given case of Apasmara. 2. Students are asked to present entire cases/ parts of a case (e.g. History, Examination, Differential Diagnosis, Investigations, Management) 3. Explain the management and justify Samprapti Vighatana 4. ROLE-PLAY - Explain the care plan, Ahara-Vihara and prognosis to the parent/ guardian 5. Record the case in the record book.
NLHP 17.2	Case Discussion: Cerebral palsy	**Duration:** 3 Hours **Preparation:** **By the teacher:** 1. Schedule and ensure the availability of real/simulated cases/case vignette of Cerebral Palsy (Different types of Cerebral Palsy) 2. Students are divided into groups (5-8 members in one group) and assigned a case. 3. Make the student understand the OPD/IPD manners during case-taking

		4. Preparing the checklist for the concerned activity. **By the student:** The student is expected to come prepared with the knowledge of Nidanapanchaka and Chikitsa of diseases Cerebral Palsy. **Activity** In the clinical classroom: Assign 1/2 real case/ simulated case/case vignette of Cerebral Palsy to each group **Bedside:** Case taking as per the protocol (in real case) A. Rapport building B. History taking C. Clinical Examination **Back in the clinical classroom:** 1. Students will discuss Samprapti Ghatakas of a given case of Cerebral Palsy. 2. Students are asked to present different cases/ parts of a case (e.g. History, Examination, Differential Diagnosis, Investigations, Management) 3. Explain the management and justify Samprapti Vighatana 4. ROLE-PLAY - Explain the care plan, Ahara-Vihara and prognosis to the parent/ guardian 5. Record the case in the record book.
NLHP 17.3	Kriyakramas (Procedure-based therapy) in Neurological Disorders in Children	**Duration**: 3 Hour **Pre-Preparation:** **By the Teacher:** 1. Identify two Kriyakramas (Procedure-based therapy) used in Neurological Disorders in children that have a reference in Ayurveda Classical Texts and are frequently used by practitioners of the respective state/ region. 2. Scheduling the demonstration and arranging the patient/ Simulator. **By the Student:** Students are expected to study Neurological Disorders in children and their management in detail before the Activity. **Activity:** 1. The teacher/therapist demonstrates the Kriyakrama to the patient. 2. Students are expected to observe – A. Pre-procedure specific to the procedure (like Handwashing, Wearing Cap/gloves/mask if needed,

		Collecting the ingredients and equipment, preparation of medicine, getting consent, fitness certificate if required, counselling the patient and caretaker) 2. Procedure (Technique of procedure, communication with the patient and caretaker) 3. Post-procedure specific to procedure and explain the Do's and Dont's to follow. 4. Discuss mode of action/Samprapti Vigatana of the procedure 5. Discuss the complementary approach. 6. Record the Procedure.

Topic 18 Unmada Rogas (Behavioral and Neurobehavioral disorders) (LH :3 NLHT: 4 NLHP: 9)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO 2,CO 3	Diagnosis and management of Bala Unmada.	CE	MK	KH	CD,L& PPT ,DIS	C-VC,T-CS	F&S	III	-	LH
CO 2,CO 3	Enlist Behavioural and Neurobehavioral Disorders in Children. Describe the aetiology, clinical features, diagnosis and management of a child with Autism Spectrum Disorders (ASD).	CK	MK	K	DIS,ML ,L&PPT	O-GAME, C-VC,T-CS	F&S	III	-	LH
CO 2,CO 3	Diagnosis and management of Buddhi Mandya.	CE	DK	KH	BS,L& GD,DIS	T-CS, C-VC	F&S	III	-	LH
CO 2,CO 3,CO 8	Describe the etiology, clinical features, diagnosis and management of a child with Intellectual Disability (Mental retardation). Describe the types, clinical features, diagnosis and management of a child with Learning Disability and Scholastic Backwardness.	CK	MK	K	L&PPT ,BS,DIS	C-VC,O-GAME,T-CS	F&S	III	-	LH
CO 2,CO 3,CO	Describe the etiology, clinical features, diagnosis and management of a child with Attention Deficit Hyperactivity Disorder (ADHD). Describe the diagnosis and management of a	CK	MK	K	CD,L& PPT ,L_VC	T-CS, C-VC,PUZ	F&S	III	-	LH

8	child with Temper Tantrums and Breath-holding spells.									
CO 2,CO 3,CO 4,CO 7	Demonstrate the skill in diagnosis and management of ASD/ ADHD/ Intellectual Disability/ Learning Disability.	PSY-GUD	MK	SH	D-BED, CBL,SIM	CWS ,CHK ,P-CASE	F&S	III	-	NLHP18.1
CO 2,CO 3	Explain the etiology, types, clinical features, diagnosis and management of a child with Shayyamutra (Enuresis), Mritbhakshana (Pica) and Thumbsucking.	CC	MK	K	FC,CBL ,BL	C-VC,CHK,PM	F&S	III	-	NLHT18.1
CO 2,CO 3,CO 4,CO 7	Demonstrate the skill in diagnosis and management of Shayyamutra/ Breath-holding spells. Discuss the referral criteria for Neurobehavioural Disorders.	PSY-GUD	MK	SH	CBL,D-BED,SIM	CWS ,P-CASE,CHK	F&S	III	-	NLHP18.2
CO 2,CO 3,CO 8	Predict the multidisciplinary approach in children with Behavioural and Neurobehavioral Disorders.	CAP	MK	KH	CBL,FC ,DIS	CL-PR,CHK,QZ	F	III	-	NLHT18.2
CO 3,CO 8	Explain Integrated Child Development Centre (ICDC).	CC	MK	KH	RLE,FV	CR-W,RK	F	III	-	NLHP18.3
CO 4,CO 6,CO 8	Plan and Explain the Ahara and Vihara for Behavioral and Neurobehavioral Disorders.	AFT-RES	MK	SH	SIM,RP	CHK,P-RP,RS	F&S	III	-	NLHT18.3
CO 2,CO	Enlist the Oushadha Yogas used in the Behavioural and Neurobehavioural Disorders. Enlist the ingredients and	CAN	MK	K	DIS,L	WP,QZ	F&S	III	-	NLHT18.4

3	indications of at least two Samanya Oushadha Yoga and two Vishesha (condition-specific) Yogas used for Behavioral and Neurobehavioral Disorders and analyze their role in Samprapti Vighatana.									
CO 2,CO 3,CO 4,CO 7	Perceive two Kriyakrama (Procedure-based therapy) used in the management of Behavioral and Neurobehavioral Disorders and Analyse the Samprapti Vighatana for Behavioral and Neurobehavioral Disorders.	PSY-SET	MK	KH	D	DOPS,DOPS	F&S	III	-	NLHP18.4

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 18.1	Shayyamutra (Enuresis), Breath Holding Spells, Mritbhakshana (Pica) and Thumbsucking.	**Duration:** 1 Hour **Pre- Preparation:** **By the teacher:** 1.Provide resource material on Shayyamutra (Enuresis), Breath Holding Spells, Mritbhakshana (Pica) and Thumbsucking (PPT/Tutorial video/Handouts) 2.Divide the students into group(8-10 students) 3. Assign one case to each group **By the Student:** Expected to study the resource material and apply it to solve the case. **Activity** 1. Students assemble in assigned groups 2. Group discussion on assigned case -10 mins 3. Students are expected to – 1. Brief about the disease from the resource material 2. Identify the symptoms 3. Identify the etiology 4. Diagnose the case and identify the type. 5. Plan the Samprati 6. Design the management plan.

		6. Justify the treatment plan.
NLHT 18.2	Multidisciplinary approach in Behavioural and Neurobehavioral Disorder	**Duration:** 1 Hour **Pre-preparation** **By the Teacher:** 1.Divide the students in groups (5 to 8 students each) and assign different cases of Behavioural and Neurobehavioral Disorders. 2.Provide the references of multidisciplinary approach in Behavioural and Neurobehavioral Disorders. **By the Student:** 1.Students are expected to come prepared with different multidisciplinary management approaches in children with Behavioural and Neurobehavioral Disorders. 2.Understand the case assigned and apply the multidisciplinary approach. **Activity:** 1. Students assemble in groups 2. Group Discussion 10 mins 3. One of the group member presents the following A. Explain the status of the child in brief B. Point out the required multidisciplinary integration for the management of the child based on present status. C. Frame a multidisciplinary management protocol. D. Explain the mode of action of all disciplines and the pivotal role of Ayurveda in the management of present behavioral and neurobehavioral disorders.
NLHT 18.3	Pathya Behavioral and Neurobehavioral Disorders	**Duration:** 1 Hour **Pre-preparation:** **By the teacher:** Divide the group and assign the topic well in advance **By the Student:** 1. Frame the Ahara and Vihara Chart for Neurological Disorders. 2. Writes the script and validate it before the class Script contains

		A. Name of the student: Role played by the student B. Script dialogues C. Using of Manikins/task trainers wherever necessary **Activity**: (Clinical classroom/class) 1. Faculty introduce the topic 2. Groups execute the role play 3. Discussions on points to be highlighted A. Ahara in different Behavioral and Neurobehavioral disorders B. Vihara in different Behavioral and Neurobehavioral disorders **Role of the faculty during activity**: The teacher evaluates the students using a rating scale/checklist and provides feedback and inputs based on their performance. Rating scale 1. Clarity of explanation - 1 (Poor) to 5 (Excellent) 2. Demonstrates empathy and understanding of the patient's emotional state - 1 (Poor) to 5 (Excellent) 3. Uses understandable words for explaining Ahara and Vihara - 1 (Poor) to 5 (Excellent) 4. Actively engages the patient, allowing for questions and checking the reception of information - 1 (Poor) to 5 (Excellent) 5. Maintains appropriate eye contact throughout the interaction - 1 (Poor) to 5 (Excellent) 6. Displays open and approachable body language – 1 (Poor) to 5 (Excellent) 7. Manages tone of voice to suit the context. – 1 (Poor) to 5 (Excellent) 8. Maintains professionalism throughout the interaction - 1 (Poor) to 5 (Excellent).
NLHT 18.4	Oushadha Yogas used in Behavioural and Neurobehavioural Disorders.	**Duration:** 1 Hour **Pre-Preparation:** **By the teacher:** 1. The teacher will give an overview of formulations used in Behavioural and Neurobehavioural Disorders along with their rationale. 2. Select two relevant formulations used in Behavioural and Neurobehavioural Disorders, which have a reference in Ayurveda Classical Texts and are frequently used by practitioners of the respective state/ region. **By the student:**

		1. Students are expected to come with the knowledge of Management of Behavioural and Neurobehavioural Disorders. 2. Collect the reference of Oushadha Yogas used in the Behavioural and Neurobehavioural Disorders from various Samhita **Activity:** 1. Enlist the Oushadha Yogas used in the Behavioural and Neurobehavioural Disorders by the students 2. Enlist two Samanya Oushadha Yoga and two Vishesha (condition-specific) Yogas used for Behavioral and Neurobehavioral Disorders 3. Group chanting of the full Sloka (at least 3 times). 4. Explain the Sloka word-by-word and highlight key terms. 5. Discuss the conceptual meaning and interpretation. 6. Explain Practical relevance. 7. Encourage questions and participant involvement. 8. Analyze the role of formulation in Samprapti Vighatana 9. Analyze the practical application of the formulations in multiple disease conditions. **Role of Teacher:** Ensure proper pronunciation and understanding of appropriate meaning.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 18.1	Case Discussion: ASD/ ADHD/ Intellectual Disability/ Learning Disability	**Duration:** 3 Hours **Pre - Preparation:** **By the teacher:** 1. Schedule and ensure the availability of real or simulated cases/ case vignettes of ASD/ ADHD/ Intellectual Disability/ Learning Disability 2. Students are divided into groups (5-8 members in one group) and assigned a case. 3. Make the student understand the OPD/IPD manners during case-taking. **By the student:** The student is expected to come prepared with knowledge of Nidanapanchaka and Chikitsa for the diseases ASD/ ADHD/ Intellectual Disability/ Learning Disability. **Activity** In the clinical classroom: Assign a real/ simulated case/case vignette of ASD/ ADHD/ Intellectual

		Disability/ Learning Disability to each group Bedside: Case taking as per the protocol (in real case) A. Rapport building B. History taking C. Clinical Examination **Back in the clinical classroom:** 1. Students will discuss Samprapti Ghatakas of a given case of ASD/ ADHD/ Intellectual Disability/ Learning Disability. 2. Students are asked to present different cases/ parts of a case (e.g. History, Examination, Differential Diagnosis, Investigations, Management) 3. Explain the management and justify Samprapti Vighatana 4. Roleplay - Explain the care plan, Ahara-Vihara and prognosis to the parent/ guardian 5. Record the case in the record book.
NLHP 18.2	Case Discussion: Shayyamutra (Enuresis)/ Breath-Holding Spells	**Duration:** 3 Hours **Preparation:** **By the teacher:** 1. Schedule and ensure the availability of real/simulated cases/case vignette of Shayyamutra (Enuresis)/ Breath Holding Spells. 2. Students are divided into groups (5-8 members in one group) and assigned a case. 3. Make the student understand the OPD/IPD manners during case-taking **By the student:** The student is expected to come prepared with the knowledge of Nidanapanchaka and Chikitsa of diseases Shayyamutra (Enuresis)/ Breath Holding Spells. **Activity** **In the clinical classroom:** Assign real or simulated cases of Shayyamutra (Enuresis)/ Breath Holding Spells to each group **Bedside:** Case taking as per the protocol (in real case) A. Rapport building B. History taking C. Clinical Examination **Back in the clinical classroom:**

		1. Students will discuss Samprapti Ghatakas of a given case of Shayyamutra (Enuresis)/ Breath Holding Spells. 2. Students are asked to present different cases/ parts of a case (e.g. History, Examination, Differential Diagnosis, Investigations, Management) 3. Explain the management and justify Samprapti Vighatana 4. ROLE-PLAY - Explain the care plan, Ahara-Vihara and prognosis to the parent/ guardian 5. Record the case in the record book. 6. The teacher should discuss the referral criteria for Neurobehavioural Disorders.
NLHP 18.3	Integrated Child Development Center	**Duration:** 2 Hours **Objective:** To provide students with a comprehensive understanding of the function of the Integrated Child Development Centre (ICDC) and how various health, nutrition and stimulation activities are carried out in collaboration with different caregivers. **Pre-Preparation:** **By the Teacher:** The teacher has to identify the suitable ICDC for the visit and make necessary arrangements. **By the Student:** Students have to come prepared with different types of multidisciplinary interventions in a child with Behavioural and Neuro-Developmental Disorders of children. **Activity** 1. Students should visit the identified ICDC and observe the ongoing interventions. 2. The teacher assists in clarifying queries of the students or facilitates it by arranging interaction with the staff of ICDC. 3. Each student will submit a brief report of the observations in ICDC and structured feedback. Evaluation: The teacher evaluates the student based on the report and feedback.
NLHP 18.4	Kriyakramas (Procedure-based therapy) in Behavioural and Neurobehavioral Disorders.	**Duration:** 1 Hour **Pre-Preparation:** **By the Teacher:** 1. Identify two Kriyakrama (procedure-based therapy) used in Behavioural and Neurobehavioral Disorders, which are referenced in Ayurveda classical texts and frequently used by practitioners of the

		respective state/ region. 2. Scheduling the demonstration and arranging the patient/ Simulator. By the Student: Students are expected to study Behavioural and Neurobehavioral Disorders and their management in detail before the Activity. **Activity:** 1. The teacher/ therapist demonstrates the Kriyakrama to the patient. 2. Students are expected to observe – A. Pre-procedure specific to the procedure (like Handwashing, Wearing Cap/gloves/mask if needed, Collecting the ingredients and equipment, preparation of medicine, getting consent, fitness certificate if required, counseling the patient and caretaker) B. Procedure (Technique of procedure, communication with the patient and caretaker) C. Post-procedure specific to the procedure and explain the Do's and Don't to follow. 3. Assignment: Write the mode of action/ Samprapti Vighatana of the procedure 4. Record the procedure.

Topic 19 Atyayika Rogas (Emergency Paediatrics) (LH :3 NLHT: 2 NLHP: 3)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO 2,CO 3	Define Status Epilepticus and describe the symptoms and management of Status Epilepticus.	CK	MK	K	CD,L&PPT ,L_VC	T-CS,PM, C-VC	F&S	III	-	LH
CO 2,CO 3	Describe the symptoms and management of Acute Breathlessness, Cardiorespiratory Arrest and Foreign Body in Respiratory Tract.	CK	MK	K	L_VC,CD,L&PPT	PM, C-VC,T-CS	F&S	III	-	LH
CO 2,CO 3	Describe the symptoms and management of Poisoning and Insect bites.	CK	MK	K	CD,L_VC,L&GD	PM, C-VC,PUZ	F&S	III	-	LH
CO 2,CO	Describe the symptoms and management of Shock in children.	CK	MK	K	CD,L&PPT	T-CS,O-QZ,PM	F	III	-	LH

3					,L_VC					
CO 2,CO 3	Apply the fluid resuscitation methods and techniques in paediatric emergencies.	CAP	DK	KH	PBL,FC ,D	O-GAME, CHK,PM	F&S	III	-	NLHT19.1
CO 2,CO 4,CO 7	Demonstrate the procedure of IV cannulation on pediatric task trainers.	PSY-GUD	DK	SH	RP,W,D-M	CHK,DOPS,RS,DOPS	F&S	III	-	NLHP19.1
CO 2,CO 7,CO 8	Demonstrate the steps to revive an unconscious child.	PSY-GUD	DK	SH	RP,SIM ,W,D-M	CHK,DOPS,DOPS,RS	F&S	III	-	NLHP19.2
CO 2,CO 3	Prepare for the administration of nebulization and per rectal medications used in paediatric practice.	CAP	DK	KH	EDU,FC,GBL	CHK,O-GAME,RS	F&S	III	-	NLHT19.2
CO 2,CO 3	Identify life-saving medications and enlist their indication.	CAP	DK	K	EDU,FC,GBL	O-GAME, CHK,RS	F	III	-	NLHP19.3

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 19.1	Fluid resuscitation methods and techniques.	**Duration** – 1 hour **Pre-Preparation** **By the Teacher** 1. Preparing the resource material on fluid resuscitation methods and techniques in paediatric emergencies (PPT/Videos/Handouts) 2. Manikin/real patient, Instruments, and equipment to demonstrate By the student: Study the resource material provided thoroughly.

		Activity: 1. Dividing the class into small groups for edutainment 2. Faculty displays a case vignette (which includes assessment of fluid status and weight measurement) at each round of the game with varying difficulty. 3. Student is expected to select the Type of fluid and plan the dose. 4. Demonstration of the fluid resuscitation technique on manikin or real patient by the faculty. 5. Compile fluid resuscitation methods and techniques in paediatric emergencies.
NLHT 19.2	Nebulization and per rectal medications used in Paediatric practice.	**Duration:** 1 Hour **Pre preparation** **By the Teacher :** 1. The teacher briefly introduces students to various indications of nebulization and per-rectal medications in paediatric practice by sharing the handouts/PPTs. 2. Required material /case vignettes (video, animations, movie clips, respiratory sounds, clinical case recordings, clinical drama, images, etc) to be collected before the session. **By the student:** Student is expected to have minimum/prior knowledge about indications of nebulization and per rectal medications before the session. **Activity** 1. Students are divided into groups 2. The teacher randomly displays animation/videos/sounds/movie clips etc related to the indication of the above procedures with varying levels of case difficulty at each level. 3. Students should identify the following a. Disease b. Procedure required c. Select a suitable drug, duration and dose **Role of a Teacher:** The teacher evaluates students' performance based on a checklist /rating scale/Scorecard.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**

NLHP 19.1	IV cannulation	**Duration -** 1 hour **Prerequisite /preparation** **By the Teacher:** 1. Prepare the IV cannula KIT, Manikin/task trainer before the session. 2. Share the resource material(PPT/Video/recorded lecture) on IV cannulation 1 week before the activity. **By the Student:** Students are expected to study the resource material before the activity. **Activity –** 1. Demonstration of IV cannulation by the faculty on task trainer/mannikin. 2. Students are divided into groups (5-8 students in one group) 3. Students are asked to demonstrate the procedure to their peers and practice the procedure. 4. Record the standard operative procedure in the activity record/logbook **Evaluation:** Faculty will evaluate using rating scale based on the student's performance. **Rating Scale** [Done: 2, Partly done: 1, Not Done: 0] **1. Pre-procedure:** A. Rapport building and assuring the patient for the procedure B. Hand hygiene and gloving C. Tourniquet application D. Site cleansing **2. Procedure:** A. Stabilize the vein B. Cannula selection C. Inserting the cannula and remove the needle D. Securing the cannula **3. Post-procedure:** A. Care for an IV cannula.
NLHP 19.2	Cardio-pulmonary resuscitation	**Duration:** 1 hour **Prerequisite/preparation** **By the Teacher:** 1. Sharing the resource material on CPR (Handout and Video)

		2. Preparing the instrument/equipment and paediatric Manikins before the session. **By the Student:** 1. Learning the resource material before the session. **Activity –** 1. Students are divided into groups (5-8 members in one group) 2. Demonstration of CPR on the paediatric manikin by the faculty 3. Demonstration of CPR on the paediatric manikin by the students in the group 4. Record the procedure. **Role of a Teacher**: The teacher evaluates students' performance based on a checklist /rating scale/Scorecard. **Rating Scale:** [Done: 2, Partly done: 1, Not done: 0] **Pre - Procedure :** Rapport building and assuring the caretaker for the procedure.(if present) **Procedure** 1. Assessing the patient by stimulus 2. Call for help 3. Position the manikin 4. Position of the rescuer 5. Perform chest compressions 6. Perform rescue breaths 7. Continue CPR/ weaning CPR **Post-procedure:** 1. Monitoring the patient.
NLHP 19.3	Lifesaving medications.	**Duration:** 1 Hour **Pre-Preparation** **By the Teacher:** 1. The teacher briefly introduces students to various emergency medicines (Related to Acute Breathlessness, Cardiorespiratory Arrest, Shock, Poisoning and Status Epilepticus) used in paediatric practice by sharing the handouts/PPT.A list of emergency medicines will be given to students.(See Appendix)

2. Required material /case vignettes (video, animations, movie clips, respiratory sounds, clinical case recordings, clinical drama, images) to be collected before the session.

By the student: The student is expected to come prepared with the provided resource material.

Activity:

1. Students are divided into groups
2. The teacher randomly displays emergency conditions through animation/videos/sounds/movie clips with varying levels of case difficulty at each level.
3. Students should identify the following

a. Diagnose the condition

b. Identify life-saving medications

c. Enlist their indication.

Role of a Teacher: The teacher evaluates students on their performance.

LIST OF EMERGENCY MEDICINES USED IN PAEDIATRICS

Respiratory Emergencies

- Swasanandam Gulika
- Rasasindooram
- Swasakutara rasa
- Abraka Bhasma
- Kastooribhairava rasa
- Salbutamol (Albuterol) – Bronchodilator for asthma and bronchospasm
- Ipratropium bromide – Anticholinergic bronchodilator
- Adrenaline (Epinephrine) – For anaphylaxis and severe asthma
- Dexamethasone – Corticosteroid for croup or severe asthma

2. Cardiovascular Emergencies

- Prabhakara vati
- Danwantharam Gulika

- Sringabhasma
- Yogendra rasa
- Sidhamakaradwaja
- Adrenaline (Epinephrine) – Cardiac arrest, anaphylaxis, bradycardia
- Atropine – For bradycardia or heart block
- Amiodarone – Antiarrhythmic for ventricular arrhythmias
- Dopamine – Inotropic support for shock or heart failure
- Norepinephrine (Noradrenaline) – Vasopressor for septic shock

3. Seizures and Neurological Emergencies

- Mansyadi kashaya
- Vatakulanthaka rasa
- Brihatvata Chintamani rasa
- Kalyanaka Grita
- Samvardhana ghrita
- Vacha churna
- Diazepam – For status epilepticus or febrile seizures
- Midazolam – For status epilepticus (intranasal or IV)
- Phenytoin – For seizure management
- Phenobarbital – For neonatal seizures or status epilepticus

4. Infections/Sepsis

- Rasasindoora
- Kaisoragulgulu
- Gandhakarasayana
- Rasamanikya
- Rasapippari

- Ceftriaxone – Broad-spectrum antibiotic for sepsis or meningitis
- Ampicillin – Antibiotic for bacterial infections, including meningitis
- Vancomycin – For resistant bacterial infections
- Clindamycin – For anaerobic infections and toxic shock syndrome

5. Metabolic and Endocrine Emergencies

- Karpoora rasa
- Balarka rasa
- Sankabhasma
- Sanjeevani vati
- Dextrose 10%, 25%, or 50% – For hypoglycemia
- Calcium gluconate – For hypocalcemia, hyperkalemia, or cardiac support
- Hydrocortisone – For adrenal insufficiency or severe shock
- Insulin – For diabetic ketoacidosis (DKA)

6. Allergic Reactions/Anaphylaxis

- Haridrakhanda
- Gandhakarasayana
- Arogyavardhini Rasa
- Laghusootasekhara rasa
- Adrenaline (Epinephrine) – First-line treatment for anaphylaxis
- Diphenhydramine (Benadryl) – Antihistamine for allergic reactions
- Methylprednisolone – Corticosteroid for severe allergic reactions

7. Fluid and Electrolyte Management

- Panchamrutha parpati
- Rasaparpati
- Karpoora churna
- Normal saline (0.9% NaCl) – For dehydration and shock
- Ringer’s lactate – Fluid resuscitation
- Oral Rehydration Solution (ORS) – For mild to moderate dehydration
- Potassium chloride – For hypokalemia

8. Pain and Fever Management

- Swarnamuktadi gulika
- Vettumaran Gulika
- Anandhabhairava rasa
- Sudarsana ghana vati
- Guluchee satwa
- Sootasekhara rasa
- Gulgulutiktakam ghrita
- Paracetamol (Acetaminophen) – For fever and mild pain
- Ibuprofen – For pain, fever, and inflammation

9. Poisoning and Overdose

- Villwadi Gulika
- Doshee vishari Gulika
- Sireeshadi vati
- Activated charcoal – For ingested poisons
- Naloxone – For opioid overdose
- N-Acetylcysteine (NAC) – For paracetamol (acetaminophen) overdose

		10. Miscellaneous • Magnesium sulfate – For torsades de pointes, severe asthma, or eclampsia • Sodium bicarbonate – For severe metabolic acidosis, hyperkalemia, or certain poisonings • Furosemide – For fluid overload or pulmonary edema

Topic 20 Bala Panchakarma (LH :5 NLHT: 0 NLHP: 8)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO 3,CO 7	Enlist Rukshana methods. plain the indications, contraindications and methods of Udwartana.	CC	MK	K	L_VC,L &GD	CL-PR,WP, M-POS	F&S	III	-	LH
CO 3,CO 7,CO 8	Analyze the selection of medicines for Udwartana. Perceive the steps of Udwartana.	PSY-SET	MK	KH	D-M,D, DIS	P-PRF,INT, SBA	F&S	III	-	NLHP20.1
CO 3,CO 7	Enlist Bahya and Abhyanthara Snehana methods. Explain the indications, contraindications and methods of Abhyanaga, Moordhnitaila and Snehapana.	CC	MK	K	RLE,L_ VC,L& GD	CL-PR,M-POS,QZ	F&S	III	-	LH
CO 3,CO 7,CO 8	Analyze the selection of medicines for Abhyanaga, Moordha Taila and Snehapana. Demonstrate Abhyanga & Pichu.	PSY-GUD	MK	SH	D,D-BE D,DIS, D-M	P-PRF,SBA ,INT	F&S	III	-	NLHP20.2
CO 3,CO 7	Enlist types and methods of Swedana. Explain the indications, contraindications and methods of Pinda Sweda, Nadisweda and Upanaha.	CC	MK	K	L_VC,L &GD	M-MOD,W P,PUZ	F&S	III	-	LH
CO 3,CO	Analyze the selection of medicine and duration for Pinda Sweda, Nadisweda and Upanaha.	CAN	MK	KH	DIS,L& GD,D	INT,SBA	F&S	III	-	NLHP20.3

7,CO 8										
CO 3,CO 4,CO 7,CO 8	Demonstrate Shashtika Shali Pinda Sweda, Nadisweda and Upanaha.	PSY-GUD	MK	SH	D-M,D-BED,D	DOPS,CHK,P-PRF,DOPS	F&S	III	-	NLHP20.4
CO 3,CO 8	Explain the Indications, Contraindications, selection of medicines and SOPs of Vamana, Virechana, Nasya and Rakthamokashana. Explain the indications, contraindications, selection of medicines and SOPs of Vasti.	CC	MK	K	L&GD,DIS,SDL	INT,M-CHT	F&S	III	-	LH
CO 7,CO 8	Perceive Vamana, Virechana, Vasti, Nasya and Raktamokashana.	PSY-SET	MK	KH	PT,D,D-M	Log book,INT,CHK	F&S	III	-	NLHP20.5
CO 3,CO 7	Discuss the application of other Karmas - Ashchyotana, Seka, Anjana, Tarpana, Karnapurana, Karnadhoopana, Kavala, Gandusha.	CC	DK	KH	DIS,RLE,L&GD	M-POS,PUZ,INT	F	III	-	LH
CO 2,CO 4,CO 7,CO 8	Perceive Kriyakalpa in children (Ashchyotana, Seka, Tarpana and Karnapurana)	PSY-SET	MK	KH	D-M,PT,D	CHK,INT,Log book	F	III	H-SH	NLHP20.6

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity

NLHP 20.1	Udwartana.	**Duration:** 1 Hour **Pre-Preparation** **By the Teacher:** 1. Arranging the real patient/manikin/pre-recorded video for a demonstration of Udwartana 2. Collection of various Udwartana Churna used in paediatric practice. **By the student**: Students should come prepared with Rukshana Methods in children and Udwartana procedure **Activity** 1. Teacher or therapist demonstrates the method of Udwartana in Children 2. The teacher opens a discussion on different kinds of Udwartana Churna used in different disease 3. Record the procedure **Role of a Teacher:** Demonstration of procedure and making sure that students analyse the selection of medicine. The teacher evaluates students based on the interaction and by giving a case scenario and asking the students to choose the appropriate Udwartana Churna.
NLHP 20.2	Snehana.	**Duration:** 1 Hour **Pre-Preparation** **By the Teacher:** 1. Arranging the real patient/manikin/pre-recorded Video for demonstration of Abhyanaga, Moordha Taila and Snehapana in children. 2. Collection of various Snehanas (Different Ghrita/Taila etc) used in Kaumarabhritya practice. By the student: Students should come prepared with the topic Snehana in children. **Activity** 1. The teacher or therapist demonstrates the method of Abhyanga, Moordha Taila and Snehapana in children. 2. The teacher opens a discussion on different kinds of Snehana used in different disease 3. Observe and record the post-procedure regimens and activity. 4. Hands-on training of different methods of Snehanas. **Role of a Teacher:** Demonstration of procedure and making sure that students analyse the selection of medicine. The teacher evaluates the students based on the interaction and by giving a case scenario and

		asking the students to choose the appropriate method of Snehana and appropriate medicine.
NLHP 20.3	Swedana I - Selection of method and dravya	**Duration:** 1 Hour **Pre-Preparation** **By the Teacher:** 1. Arranging the real patient/clinical video of patients requiring Pinda Sweda, Nadisweda and Upanaha 2. Collection of various Swedana Dravya **By the student:** Students should come prepared with the topic Swedana in children. **Activity** 1. The teacher opens a discussion on different methods of Swedana in different diseases in children. 2. The teacher presents different clinical cases of patients requiring Pinda Sweda, Nadisweda and Upanaha and discusses different Dravyas used. **Role of a Teacher:** The teacher evaluates students based on the interaction by giving a case scenario and asking the students to choose the appropriate method of Swedana and appropriate Dravya.
NLHP 20.4	Swedana II.	**Duration:** 1 Hour **Pre-Preparation** **By the Teacher:** 1. Arranging the real patient/manikin/recorded Video for demonstration of Shashtika Shali Pinda Sweda, Nadisweda and Upanaha in children. 2. Collection of various Swedana Dravya and equipment used in paediatric practice. **By the student:** Students should come prepared with the topic Swedana in children. **Activity** 1. The teacher or therapist demonstrates the method of Shashtika Shali Pinda Sweda, Nadisweda and Upanaha in children. 2. Observe and record the post-procedure regimens and activity. 3. Hands-on training of different methods of Swedana i.e., Shashtika Shali Pinda Sweda, Nadisweda and Upanaha in children. **Role of a Teacher:** The teacher evaluates students based on their performance using a checklist. **Checklist: Yes/No**

		1. Explains the procedure and take the consent 2. Explains the pre-procedure 3. Perform Shashtika Shali Pinda Sweda, Nadisweda and Upanaha optimally. 4. Explain the post-procedure regimens efficiently.
NLHP 20.5	Panchakarma in children	**Duration**: 3 hours **Prerequisite /preparation** **By the Teacher:** 1. Arranging the real patient/recorded Video for demonstration of Vamana, Virechana, Vasti, Nasya and Raktamokshana in children. 2. Ensure the arrangements in the theatre with all necessary prerequisites for the procedure. 3. Instruct the students about the code of conduct during the procedure. By the student: Students are expected to come prepared with the topic Panchakarma in children. **Activity –** 1. Demonstration of Vamana, Virechana, Vasti, Nasya and Raktamokshana in children on real patient/ pre-recorded video. 2. Discussion on Pre-procedure, Procedure and Post-procedure regimen and activity. 3. Record the procedure in the log book. **Role of a Teacher:** The teacher evaluates students based on the interaction and Checklist **Checklist:** 1. Skills of obtaining the consent: Perceived/Not perceived 2. Pre-procedure: Perceived/Not perceived A. Rapport building and assuring the patient of the procedure B. Collection of necessary Dravya and equipment 3. Procedure (SOP of Vamana, Virechana, Vasti, Nasya, and Raktamokashana in children): Perceived/Not perceived 4. Post-procedure (Post procedure regimens and activity): Perceived/Not perceived.
NLHP 20.6	Kriyakalpa in children	**Duration:** 1 hour **Pre-preparation:**

		By the Teacher: 1. Arranging the real patient/recorded video for a demonstration of Ashchyotana, Seka, Tarpana and Karnapurana in children. 2. Ensure the arrangements in the theatre with all necessary prerequisites for the procedure. 3. Instruct the students about the code of conduct during the procedure. **By the student:** Students are expected to come prepared with the topic of Ashchyotana, Seka, Tarpana and Karnapurana. **Activity –** 1. Demonstration of Ashchyotana, Seka, Tarpana and Karnapurana on real patient/ pre-recorded video. 2. Discussion on Pre-procedure, Procedure and Post-procedure regimen and activity. 3. Record the procedure. **Role of a Teacher**: The teacher evaluates students based on the interaction.

Topic 21 Kishora Swasthya (Adolescent Health) (LH :2 NLHT: 0 NLHP: 1)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO 1,CO 3,CO 8	Analyze the understanding of Kishora Swasthya (adolescent health) in Ayurveda. Define adolescence. Explain the stages of adolescence. Explain the physical, physiological and psychological changes during adolescence.	CAN	DK	KH	PER,PL ,FC,DIS	CL-PR,INT ,DEB	F&S	III	-	LH
CO 1,CO 3	Assess the physical, physiological and psychological changes during adolescence.	CE	DK	KH	GBL,PB L,EDU	O-QZ,O-GAME	F&S	III	-	NLHP21.1
CO 1,CO 2,CO 8	Enlist the health problems during adolescence. Explain adolescent sexuality	CC	MK	K	DIS,L& PPT	WP,O-QZ,QZ	F&S	III	-	LH

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 21.1	Adolescence.	**Duration:** 1 Hour **Pre-Preparation** **By the Teacher:** 1. Dividing the students into groups 2. Case vignettes (videos/images) to be arranged before the session. **By the student:** The student is expected to come prepared with the topic **Activity** 1. Students gather in groups. 2. Teacher randomly displays videos/images. 3. Students should assess the physical, physiological and psychological changes. **Role of a Teacher:** The teacher evaluates students' performance based on a checklist /rating scale/Scorecard. **Checklist:** 1. Identifies the normal growth and development according to age accurately 2. Identifies physical, physiological and psychological changes in adolescence precisely 3. Identify the deviation in normal changes during adolescence. 4. Good Team Collaboration.

Topic 22 Anya Rogas (Miscellaneous Diseases) (LH :1 NLHT: 1 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO 2,CO 3	Describe the Inborn errors of metabolism, Congenital Rubella Syndrome, Celiac Disease, Spinal Muscular Atrophy, Guillain Barre Syndrome, Sickle Cell Anemia, Wilson's Disease, Utpullika, Ajagallika, Kukunaka and Talu Kantaka.	CK	DK	K	DIS,L_ VC,L& PPT	O-GAME,QZ ,WP	F	III	-	LH

CO 2,CO 3	Diagnose Inborn errors of metabolism, Congenital Rubella Syndrome, Celiac Disease, Spinal Muscular Atrophy, Guillain Barre Syndrome, Sickle Cell Anemia, Wilson's Disease, Utphullika, Ajagallika, Kukunaka and Talu Kantaka.	CE	DK	KH	PBL,FC ,ML,ED U	CHK,RS,O-GAME	F	III	-	NLHT22.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 22.1	Miscellaneous diseases	**Duration:** 1 Hour **Pre-Preparation** **By the Teacher:** 1. Dividing the students into groups 2. Case vignettes (videos/images) to be collected before the session. **By the student:** 1. Student is expected to come prepared with the topic Inborn errors of metabolism/ Congenital Rubella Syndrome/ Celiac Disease/ Spinal Muscular Atrophy/ Guillain Barre Syndrome/ Sickle Cell Anemia/ Wilson's Disease/Utphullika/Ajagallika/ Kukunaka/Talu Kantaka before coming to the session. **Activity** 1. Students gather in groups 2. Teacher randomly displays videos/images 3. Students are expected A. Identify the symptoms B. Diagnose the case **Role of a Teacher:** The teacher evaluates students' performance based on a checklist/rating scale/Scorecard. **Checklist:** 1. Identifies the symptom accurately 2. Diagnose the case correctly. 3. Good collaboration.

Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**

Table 4 : NLHT Activity

(*Refer table 3 of similar activity number)

Activity No*	CO No	Activity details
2.1	CO 1,CO 3,CO 5,CO 6	Childhood Samskaras
3.1	CO 3,CO 7,CO 8	Navajata Shishu Paricharya and Pranapratyagamana
3.2	CO 1,CO 3	Ayu Pariksha Vidhi
3.3	CO 3,CO 5,CO 6	Neonatal disorders
4.1	CO 5,CO 6	Complementary feeding I (in the absence of Stanya)
4.2	CO 5,CO 6	Complementary feeding II (in the absence of Breastmilk)
4.3	CO 3,CO 5	Swarnaprashana
4.4	CO 4,CO 5,CO 8	Breast feeding week program.
4.5	CO 2,CO 3	Ksheeralasaka
5.1	CO 3,CO 5	Vyadhikshamatwa and Immunity I
5.2	CO 3,CO 5,CO 6	Vyadhikshamatwa and Immunity II
5.3	CO 4,CO 5,CO 6	RCH programmes and Perinatal care for Healthy Child
6.1	CO 2,CO 3	Concept of Phakka Roga
6.2	CO 2,CO 3	Kuposhana Janya Vyadhis and Nutritional Deficiency Disorders
8.1	CO 2,CO 3,CO 6,CO 8	Procedure based therapies and Oushadhas in Sahaja Vyadhis
8.2	CO 2,CO 3,CO 8	Surgical intervention and referral criteria of Congenital and Chromosomal disorders
9.1	CO 3,CO 6,CO 8	Management(Chikitsa) of tuberculosis in children.

9.2	CO 2,CO 3	Concept of Graha Roga in context of infectious diseases.
9.3	CO 3,CO 6	Management of different type of Jwara.
9.4	CO 2,CO 3	Oushadha yogas used for Krimi Chikitsa.
10.1	CO 2,CO 3	Oushadha Yoga in Pratishaya, Kasa, Shwasa..
10.2	CO 4,CO 6,CO 8	Ahara and Vihara for Pratishaya, Kasa, Shwasa
11.1	CO 3,CO 4,CO 6	Oushadha Yogas, Pathya in Aatisara, Grahani and Pravahika.
11.2	CO 3,CO 4,CO 6	Oushadha Yogas and Pathya used in Chhardi.
11.3	CO 2,CO 3,CO 6	Oushadha Yoga and Pathya in Vibandha.
12.1	CO 2,CO 3	Bheda and referral criteria of Pandu and Anemia.
12.2	CO 2,CO 3	Haemorrhagic Diseases in children.
12.3	CO 2,CO 3	Udara Roga: hepatomegaly and splenomegaly.
13.1	CO 2,CO 3,CO 4,CO 6	Diabetes Mellitus (Prameha)
13.2	CO 1,CO 2,CO 3,CO 6	Precocious and Delayed Puberty
14.1	CO 2,CO 3	Refererral criteria of Genito urinary disorders
14.2	CO 2,CO 3,CO 6	Scope of treatment & ahara-vihara plan in Mutra vaha Sroto Vikara
15.1	CO 2,CO 3,CO 6	Referral criteria & Pathya in Rheumatological disorders.
15.2	CO 2,CO 3,CO 6	Integrated treatment for Rheumatological Disorders

16.1	CO 2,CO 3,CO 6	Case Discussion: Arumshika
16.2	CO 2,CO 4,CO 6	Pathya in Twak Roga.
16.3	CO 2,CO 3	Oushadha Yogas used in Twak Roga
17.1	CO 2,CO 3,CO 4	Jalasheershaka (Hydrocephalus)
17.2	CO 2,CO 3,CO 4,CO 7	Communication Disorders.
17.3	CO 4,CO 6,CO 8	Pathya in Neurological Disorders.
17.4	CO 2,CO 3	Oushadha Yogas used in Neurological Disorders.
18.1	CO 2,CO 3	Shayyamutra (Enuresis), Breath Holding Spells, Mritbhakshana (Pica) and Thumbsucking.
18.2	CO 2,CO 3,CO 8	Multidisciplinary approach in Behavioural and Neurobehavioral Disorder
18.3	CO 4,CO 6,CO 8	Pathya Behavioral and Neurobehavioral Disorders
18.4	CO 2,CO 3	Oushadha Yogas used in Behavioural and Neurobehavioural Disorders.
19.1	CO 2,CO 3	Fluid resuscitation methods and techniques.
19.2	CO 2,CO 3	Nebulization and per rectal medications used in Paediatric practice.
22.1	CO 2,CO 3	Miscellaneous diseases

Table 5 : List of Practicals

(*Refer table 3 of similar activity number)

Practical No*	CO No	Practical Activity details
2.1	CO 1,CO 3	Assessment of Growth I
2.2	CO 1,CO 3	Assessment of Growth II
2.3	CO 1,CO 3	Status of Dhatu
2.4	CO 1,CO 3	Undernourished child
2.5	CO 1,CO 4	Assessment of Developmental Milestones in normal child
2.6	CO 1,CO 2,CO 4	Assessment of Developmental Delay
2.7	CO 1,CO 2,CO 4	Case of Developmental Delay
3.1	CO 3,CO 7,CO 8	Neonatal Resuscitation and Intranatal care.
3.2	CO 1,CO 7	Examination of Newborn and Assessment of gestational age.
3.3	CO 3,CO 4,CO 7	Newborn care after discharge
3.4	CO 2,CO 3	Neonatal seizures /Akshepaka and Skandapasmara.
3.5	CO 2,CO 3	Neonatal diseases
3.6	CO 2,CO 3	Case of Neonatal Jaundice.
4.1	CO 4,CO 7,CO 8	Breastfeeding techniques
4.2	CO 5,CO 6	Complementary feeding Survey
4.3	CO 1,CO 3,CO 4,CO 8	Stanya Vriddhi, Stanya Kshaya and Stanya Pareeksha

4.4	CO 5,CO 7	Preparation of Swarnaprashana
5.1	CO 1,CO 4,CO 5,CO 6	Nutritional Assessment in children
5.2	CO 3,CO 4,CO 5	Parent Counselling on Immune modulation
5.3	CO 4,CO 5,CO 7,CO 8	Immunization in children
6.1	CO 2,CO 3,CO 6	Case Discussion: Malnutrition
7.1	CO 2,CO 3	Calculation of Pediatric Drug Doses
7.2	CO 2,CO 4,CO 7	Application of Samprapti Gatakas in a Pediatric Case: Part I
7.3	CO 2,CO 3	Application of Samprapti Gatakas in a Pediatric Case: Part II
7.4	CO 2,CO 3,CO 6,CO 7	Clinical case taking
7.5	CO 2,CO 4,CO 6,CO 8	Conseling regarding patient care
7.6	CO 2,CO 3,CO 6	Pediatric Ethobotonical Survey of Herbal Garden
8.1	CO 2,CO 3,CO 8	Turner syndrome
8.2	CO 2,CO 3,CO 8	Down syndrome
8.3	CO 2,CO 3,CO 4,CO 8	Prevention of Congenital anomalies
9.1	CO 2,CO 3,CO 4	Case Discussion: Auspasagika Jwara and Krimi Roga
9.2	CO 6,CO 8	Pathya and Kriyakrama used in Jwara and Krimi.
10.1	CO 2,CO 3,CO 7	Examination of Ear and Throat
10.2	CO 2,CO 3,CO 4	Case Discussion: Pratishyaya.
10.3	CO 2,CO 3,CO 4	Case Discussion: Kasa.

10.4	CO 2,CO 3,CO 4	Case Discussion: Shwasa.
10.5	CO 7,CO 8	Kriyakrama used in management of Pratishaya,Kasa & Shwasa
11.1	CO 3,CO 4,CO 6	Physiological basis and composition of various ORT
11.2	CO 3,CO 7,CO 8	Kriyakrama used in the management(Chikitsa) of Chhardi.
11.3	CO 3,CO 7,CO 8	Kriyakrama used in the management of Vibandha.
11.4	CO 2,CO 3	Case Discussion:Mukhapaaka, Gulma, Gudabramsa and Parikartika.
11.5	CO 2,CO 3	Signs and symptoms of GI and Liver disorders
11.6	CO 2,CO 3,CO 4	Case Discussion: Maha Stroto Vikara.
12.1	CO 2,CO 3,CO 6	Complementary, alternative treatment protocol, Pathya in Anemia.
12.2	CO 3,CO 7,CO 8	Kriyakrama used in management of Pandu
12.3	CO 2,CO 3,CO 6	Complementary, alternative treatment protocol, Pathya in Kamala.
12.4	CO 3,CO 7,CO 8	Kriyakrama used in the management of Kamala.
12.5	CO 2,CO 3,CO 4,CO 6	Case Discussion: Pandu, Anaemia and Kamala.
13.1	CO 2,CO 3,CO 7	KriyaKrama in T1DM
14.1	CO 2,CO 3,CO 4	Examination of kleda agni kosta in mutra and shukra vaha srotas
14.2	CO 3,CO 4,CO 7	Kriya karma in Mutra Vaha Sroto Vikara
15.1	CO 3,CO 7,CO 8	Kriya Krama in Rheumatological disorders
15.2	CO 2,CO 3,CO 4,CO 7	Case Discussion: Amavata
15.3	CO 2,CO 3,CO 4	Nidanapnachaka of Rheumatological disorders
16.1	CO 2,CO 3,CO 4,CO	Case Discussion: Kusta/ Charmadala/ Visarpa.

	6	
16.2	CO 4,CO 7,CO 8	Kriyakramas (Procedure-based therapy) in Twak Roga.
17.1	CO 2,CO 3,CO 4,CO 7	Case Discussion: Apasmara.
17.2	CO 2,CO 3,CO 4,CO 7	Case Discussion: Cerebral palsy
17.3	CO 2,CO 3,CO 7,CO 8	Kriyakramas (Procedure-based therapy) in Neurological Disorders in Children
18.1	CO 2,CO 3,CO 4,CO 7	Case Discussion: ASD/ ADHD/ Intellectual Disability/ Learning Disability
18.2	CO 2,CO 3,CO 4,CO 7	Case Discussion: Shayyamutra (Enuresis)/ Breath-Holding Spells
18.3	CO 3,CO 8	Integrated Child Development Center
18.4	CO 2,CO 3,CO 4,CO 7	Kriyakramas (Procedure-based therapy) in Behavioural and Neurobehavioral Disorders.
19.1	CO 2,CO 4,CO 7	IV cannulation
19.2	CO 2,CO 7,CO 8	Cardio-pulmonary resuscitation
19.3	CO 2,CO 3	Lifesaving medications.
20.1	CO 3,CO 7,CO 8	Udwartana.
20.2	CO 3,CO 7,CO 8	Snehana.
20.3	CO 3,CO 7,CO 8	Swedana I - Selection of method and dravya
20.4	CO 3,CO 4,CO 7,CO 8	Swedana II.
20.5	CO 7,CO 8	Panchakarma in children
20.6	CO 2,CO 4,CO 7,CO 8	Kriyakalpa in children
21.1	CO 1,CO 3	Adolescence.

Table 6 : Assessment Summary: Assessment is subdivided in A to H points

6 A : Number of Papers and Marks Distribution

Subject Code	Papers	Theory	Practical/Clinical Assessment (200)					Grand Total
			Practical	Viva	Elective	IA	Sub Total	
AyUG-KB	1	100	100	60	10 (Set-TB)	30	200	300

6 B : Scheme of Assessment (Formative and Summative)

PROFESSIONAL COURSE	FORMATIVE ASSESSMENT			SUMMATIVE ASSESSMENT
	First Term (1-6 Months)	Second Term (7-12 Months)	Third Term (13-18 Months)	
Third	3 PA & First TT	3 PA & Second TT	3 PA	**UE****

PA: Periodical Assessment; **TT:** Term Test; **UE:** University Examinations; **NA:** Not Applicable.
**University Examination shall be on entire syllabus

6 C : Calculation Method for Internal assessment Marks

TERM	PERIODICAL ASSESSMENT*					TERM TEST**	TERM ASSESSMENT	
	A 6	B	C	D	E	F	G	H
	1 (15 Marks)	2 (15 Marks)	3 (15 Marks)	Average (A+B+C/3)	Converted to 30 Marks (D/15*30)	Term Test (Marks converted to 30)	Sub Total _/60 Marks	Term Assessment (…./30)
FIRST							E+F	(E+F)/2
SECOND							E+F	(E+F)/2
THIRD						NIL		E
Final IA	Average of Three Term Assessment Marks as Shown in 'H' Column.							
	Maximum Marks in Parentheses *Select an Evaluation Method which is appropriate for the objectives of Topics from the Table 6 D for Periodic assessment. Conduct 15 marks assessment and enter marks in A, B, and C. ** Conduct Theory (100 Marks)(MCQ(20*1 Marks), SAQ(8*5), LAQ(4*10)) and Practical (100 Marks) Then convert to 30 marks.							

6 D : Evaluation Methods for Periodical Assessment

S. No.	Evaluation Methods
1.	Practical / Clinical Performance
2.	Viva Voce, MCQs, MEQ (Modified Essay Questions/Structured Questions)
3.	Open Book Test (Problem Based)
4.	Summary Writing (Research Papers/ Samhitas)
5.	Class Presentations; Work Book Maintenance
6.	Problem Based Assignment
7.	Objective Structured Clinical Examination (OSCE), Objective Structured Practical Examination (OPSE), Mini Clinical Evaluation Exercise (Mini-CEX), Direct Observation of Procedures (DOP), Case Based Discussion (CBD)
8.	Extra-curricular Activities, (Social Work, Public Awareness, Surveillance Activities, Sports or Other Activities which may be decided by the department).
9.	Small Project
10.	Activities Indicated in Table 3 - Column G3 as per Indicated I, II or III term in column I3.

Topics for Periodic Assessments

	Paper 1
PA 1	Topic 1,2
PA 2	Topic 3
PA 3	Topic 4
Term Test 1	Entire Syllabus of Term 1
PA 4	Topic 6,7,8
PA 5	Topic 9,10,11
PA 6	Topic 11,12
Term Test 2	Entire Syllabus of Term 2
PA 7	Topic 14,15,16
PA 8	Topic 16,17,18
PA 9	Topic 19,20,21

6 E : Question Paper Pattern

III PROFESSIONAL BAMS EXAMINATIONS
AyUG-KB
PAPER-I
Time: 3 Hours Maximum Marks: 100
INSTRUCTIONS: All questions compulsory

		Number of Questions	**Marks per question**	**Total Marks**
Q 1	MULTIPLE CHOICE QUESTIONS (MCQ)	20	1	20
Q 2	SHORT ANSWER QUESTIONS (SAQ)	8	5	40
Q 3	LONG ANSWER QUESTIONS (LAQ)	4	10	40
				100

6 F : Distribution of theory examination

Paper 1 (KAUMARABHRITYA)					
Sr. No	**A List of Topics**	**B Marks**	**MCQ**	**SAQ**	**LAQ**
1	**Introduction to Kaumarabhritya**	1	Yes	No	No
2	**Bala Samvardhana (Growth and Development)**	7	Yes	Yes	No
3	**Navajata Vijnana (Neonatology)**	11	Yes	Yes	Yes
4	**Stanya Vijnana (Breast Milk)**	11	Yes	Yes	Yes
5	**Bala Poshana (Child Nutrition) & Vyadhikshamatva (Immunity)**		Yes	Yes	Yes
6	**Kuposhana Rogas (Nutritional disorders)**	7	Yes	Yes	No
7	**Balaroga Pariksha Vidhi & Chikitsa Siddhantha (Pediatric Examination and treatment principles)**		Yes	Yes	No
8	**Kulaja and Sahaja Rogas (Genetic and Congenital Disorders)**	5	Yes	Yes	No
9	**Graha Rogas and Aupasargika Rogas (Infectious Diseases)**	8	Yes	Yes	No
10	**Swasana Rogas [Disorders of Respiratory system]**	10	Yes	Yes	Yes
11	**Mahasrota Roga [Gastro Intestinal Disorders]**		Yes	Yes	Yes
12	**Rasa Rakta Rogas [Disorders of blood and cardiovascular system]**	10	Yes	Yes	Yes
13	**Antahsravee Granthi Rogas (Disorders of Endocrine System)**		Yes	Yes	Yes
14	**Mutravaha Sroto Rogas (Disorders of Genito urinary system)**	5	Yes	Yes	No
15	**Sandhi Rogas (Rheumatological Disorders)**		Yes	Yes	No
16	**Twak Rogas (Dermatological Disorders)**	13	Yes	Yes	Yes
17	**Sira Snayu Rogas (Nervous system disorders)**		Yes	Yes	Yes
18	**Unmada Rogas (Behavioral and Neurobehavioral disorders)**		Yes	Yes	Yes
19	**Atyayika Rogas (Emergency Paediatrics)**	12	Yes	Yes	Yes
20	**Bala Panchakarma**		Yes	Yes	Yes
21	**Kishora Swasthya (Adolescent Health)**		Yes	No	No
22	**Anya Rogas (Miscellaneous Diseases)**		Yes	No	No
Total Marks		**100**			

6 G : Instructions for UG Paper Setting & Blue print

1. All questions shall be compulsory.
2. Questions shall be drawn based on Table 6F, which provides the topic name, types of questions (MCQ(Multiple Choice Question), SAQ(Short Answer Question), LAQ(Long Answer Question)).
3. The marks assigned in Table 6F for each topic/group of topics shall be considered as the maximum allowable marks for that topic/group of topics.
4. Ensure that the total marks allocated per topic/group of topics do not exceed the limits specified in Table 6F.
5. Refer to Table 6F before setting the questions. Questions shall be framed only from topics where the type is marked as “YES”, and avoided if marked as “NO”.
6. Each 100-mark question paper shall contain:
   - 20 MCQs
   - 8 SAQs
   - 4 LAQs

7. MCQs:
   - Majority shall be drawn from the Must to Know part of the syllabus.
   - Questions from the Desirable to Know part of syllabus shall not exceed 3.
   - Questions from the Nice to Know part of syllabus shall not exceed 2.

8. SAQs:
   - Majority shall be drawn from the Must to Know part of the syllabus.
   - Questions from the Desirable to Know part of syllabus shall not exceed 1.
   - No questions shall be drawn from the Nice to Know part of syllabus.
   - SAQs shall assess understanding, application, and analysis, rather than simple recall.

9. LAQs:
   - All LAQs shall be drawn exclusively from the Must to Know part of the syllabus.
   - No questions shall be taken from the Desirable to Know or Nice to Know part of the syllabus.
   - Number of LAQs should not exceed one per topic unless maximum marks exceed 20 for the topic.

10. Long Answer Questions shall be structured to assess higher cognitive abilities, such as application, analysis, and synthesis.
11. Follow the guidelines in User Manual III for framing MCQs, SAQs, and LAQs.

6 H : Distribution of Practical Exam

S.No	Heads	Marks
1	**Skill based Examination** 1. Diagnostic station (Lab report/Xray Report/USG report etc): 5 marks 2. Demonstration Station (Newborn resuscitation/Breastfeeding/Breast milk examination etc): 10 marks 3. Case-based evaluation/Situational Judgment test & referral Station: 5 marks 4. Prescription writing Station: 5 marks 5. Dosage station/PathyaPathya Station: 5 marks	30 Marks
2	**Practical CaseTaking** A. History taking: 5 marks B. Preliminary data, Growth, and Development Assessment: 5marks C. Systemic examination: 10 marks D. Dosha, Dhatu Pareesha: 5 marks E. Investigations: 5 marks F. Differential Diagnosis/diagnosis: 5 marks G. Treatment protocol and justification: 10 marks H. Prescription and counseling of parent/ caretaker: 10 marks I. Communication skill, Confidence, Body language: 5 marks	60 Marks
3	**Structured Viva** Total 15 questions of varied difficulty level like easy, medium and difficult. • Question 1: Topic 1,2,3 • Question 2: Topic 4,5 • Question 3: Topic 6,7,8,9 • Question 4: Topic 10,11,12,13 • Question 5: Topic 14,15,16	60 Marks

	• Question 6: Topic 17,18,19 • Question 7: Topic 20,21,22 • Question 8: Topic 1,2,3,4,5 • Question 9: Topic 6,7,8,9, • Question 10: Topic 10,11,12,13 • Question 11: Topic 14,15,16,17, • Question 12: Topic 18,19,20,21,22 • Question 13: Topic 1,2,3,4,5 • Question 14: Topic 6,7,8,9,10,11,12,13 • Question 15: Topic 14,15,16,17,18,19,20,21,22 **Communication & Confidence**: 5 Marks	
4	**Practical Record** 1. Comprehensive and Veracity (2 mark) 2. Complete case record (2 mark) 3. Documentation and presentation (2 marks) 4. Minimum number of cases (4 marks) **Record Content** - • Neonatal Case Sheet - 3 • Assessment of Growth (Status of Dhatu and Undernourishment) - 4 • Developmental Disorder Case Sheet - 4 • Nutrition Assessment Case Sheet - 2 • Nutritional deficiency Disorders -2 • Sroto Vikara Case Sheet - 10	10 Marks
5	**Elective**	10 Marks
6	**Internal Assessment**	30 Marks
Total Marks		**200**

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Abbreviations

Domain		T L Method		Level		Assessment		Integration	
CK	Cognitive/Knowledge	L	Lecture	K	Know	T-CS	Theory case study	V-RS	V RS
CC	Cognitive/Comprehension	L&PPT	Lecture with PowerPoint presentation	KH	Knows how	T-OBT	Theory open book test	V-KS	V KS
CAP	Cognitive/Application	L&GD	Lecture & Group Discussion	SH	Shows how	P-VIVA	Practical Viva	H-KC	H KC
CAN	Cognitive/Analysis	L_VC	Lecture with Video clips	D	Does	P-REC	Practical Recitation	H-SH	H SH
CS	Cognitive/Synthesis	REC	Recitation			P-EXAM	Practical exam	H-PK	H PK
CE	Cognitive/Evaluation	SY	Symposium			PRN	Presentation	H-SHL	H SHL
PSY-SET	Psychomotor/Set	TUT	Tutorial			P-PRF	Practical Performance	H-SP	H SP
PSY-GUD	Psychomotor/Guided response	DIS	Discussions			P-SUR	Practical Survey	H-KB	H-KB
PSY-MEC	Psychomotor/Mechanism	BS	Brainstorming			P-EN	Practical enact	H-Samhita	H-Samhita
PSY-ADT	Psychomotor Adaptation	IBL	Inquiry-Based Learning			P-RP	Practical Role play	V-DG	V DG
PSY-ORG	Psychomotor/Origination	PBL	Problem-Based Learning			P-MOD	Practical Model	V-RN	V RN
AFT-REC	Affective/ Receiving	CBL	Case-Based Learning			P-POS	Practical Poster	V-RS	V RS
AFT-RES	Affective/Responding	PrBL	Project-Based Learning			P-CASE	Practical Case taking	V-AT	V AT
AFT-VAL	Affective/Valuing	TBL	Team-Based Learning			P-ID	Practical identification	V-SW	V SW
AFT-SET	Affective/Organization	TPW	Team Project Work			P-PS	Practical Problem solving		
AFT-CHR	Affective/ characterization	FC	Flipped Classroom			QZ	Quiz		
PSY-PER	Psychomotor/perception	BL	Blended Learning			PUZ	Puzzles		
PSY-COR	Psychomotor/ Complex Overt Response	EDU	Edutainment			CL-PR	Class Presentation		
		ML	Mobile Learning			DEB	Debate		
		ECE	Early Clinical Exposure			WP	Word puzzle		
		SIM	Simulation			O-QZ	Online quiz		
		RP	Role Plays			O-GAME	Online game-based assessment		
		SDL	Self-directed learning			M-MOD	Making of Model		
		PSM	Problem-Solving Method			M-CHT	Making of Charts		
		KL	Kinaesthetic Learning			M-POS	Making of Posters		

		W	Workshops			C-INT	Conducting interview		
		GBL	Game-Based Learning			INT	Interactions		
		LS	Library Session			CR-RED	Critical reading papers		
		PL	Peer Learning			CR-W	Creativity Writing		
		RLE	Real-Life Experience			C-VC	Clinical video cases		
		PER	Presentations			SP	Simulated patients		
		D-M	Demonstration on Model			PM	Patient management problems		
		PT	Practical			CHK	Checklists		
		X-Ray	X-ray Identification			Mini-CEX	Mini-CEX		
		CD	Case Diagnosis			DOPS	DOPS		
		LRI	Lab Report Interpretation			CWS	CWS		
		DA	Drug Analysis			RS	Rating scales		
		D	Demonstration			RK	Record keeping		
		D-BED	Demonstration Bedside			COM	Compilations		
		DL	Demonstration Lab			Portfolios	Portfolios		
		DG	Demonstration Garden			Log book	Log book		
		FV	Field Visit			TR	Trainers report		
						SA	Self-assessment		
						PA	Peer assessment		
						360D	360-degree evaluation		
						PP-Practical	Practical		
						VV-Viva	Viva		
						DOAP	Demonstration Observation Assistance Performance		
						SBA	Scenario Based Assessment		
						CBA	Case based Assessment		
						S-LAQ	Structured LAQ		
						OSCE	Observed Structured Clinical Examination		
						OSPE	Observed Structured Practical Examination		
						DOPS	Direct observation of procedural skills		

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AYURVEDACHARYA (B.A.M.S.)

THIRD PROFESSIONAL B.A.M.S.

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Examination Reg. No. :

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Name of the department

Batch- _____

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Journal Cum Activity Book

DEPARTMENT OF

<< Name of Department >>

Name of the College

INDEX

Sr no	Topic	Date	Page no
1			
2			
3			
4			

Sl.No	Minimum No of cases to be included as per the following guidelines
1.	**Neonatal Case sheet- 03 Cases**
2.	**Assessment of Growth (Status of Dhatu and Undernourishment)- 04 Cases**
3.	**Development Disorder Case sheet - 04 cases**
4.	**Nutritional Case sheet – 04 cases**
5.	**Sroto Vikara Case Sheet – 10 cases**

NEONATAL CASE SHEET

1. **Source of history:**

Particulars of the neonate

Name:	Sl. No :
Age and Gender:	O.P.D No :
Name of the Mother:	I.P.D N :
Age and occupation :	Bed No :
Name of the father :	D.O.A :
Age and occupation :	D.O.D :
Educational Status:	Address :

Mother :
Father :

Socio economic Status of parents:

2. History

i) Chief complaints:

ii) History of present illness:

3. Family history:

4. Maternal history:

i) Antenatal history-illness/drugs/radiations:

ii) Age of mother: Gravida: Para: Abortion: Live:

Blood group: Weight of mother: Nutritional status:

LMP: EDD: Gestational age:

I. Trimester: II. Trimester: III. Trimester:

5. Birth History

a. Mode of delivery:

1. Vaginal Delivery (spontaneous/ assisted):

Presentation: Duration of labour:

2. Cesarean section: Indication:

b. Place of delivery (home/hospital/PHC/nursing home/others):

c. Place of delivery (home/Institutional):

e. Evidence of fetal distress:

d. Complication during delivery (Asphyxia/Nerve injury/ Skeletal injury/Others):

f. APGAR Score at 1 min: 5min:

g. Resuscitation :

5. Postnatal history:

6. Personal history:

a. Cry
b. Feeding:
c. Passage of meconium:
d. Passage of urine:

e. Activity: Vigorous/ Non viogorous
f. Pattern of sleep:
g. Jatakarma Samskara/Prashana:

8. General examination:

1. Anthropometry: Length: Weight: HC: CC: MAC:

2. Vitals: Temp: Respiratory rate: Heart rate: CRT:

3. Head to toe

examination: Skin:

Head & Neck:

Trunk:

Genitalia:

Extremities:

Spine and back:

9. Assessment for Gestational Maturity

i. Scalp hair

ii. Ear cartilage and recoil

iii. Lanugo hairs

iv. Skin

v. Size of breast nodule and color of areola

vi. External genitalia

vii. Sole creases

viii. Others

10. Neurological Examinations

1. General alertness
2. Muscle tone:
    a. Posture
    b. Limb positive recoil
    c. Popliteal angle
    d. Scarf sign
3. Joint mobility:

    Square window

4. Neonatal reflexes:
    a. Sucking
    b. Rooting
    c. Palmar grasp
    d. Plantar grasp
    e. Glabellar tap
    f. Moro's

11. Systemic examination

R

S

C

V

S

C

N

S

Others

13. Laboratory investigations:

Blood group and Rh type: Hb%:

Serum bilirubin: Direct Indirect Total

CBC CRP

14. Diagnosis

15. Treatment

i) Chikitsa:

ii) Paricharya:

iii) Advice at the time of Discharge:

SIGNATURE OF THE STUDENT **SIGNATURE OF THE FACULTY**

ASSESSMENT OF GROWTH (STATUS OF DHATU AND UNDERNOURISHMENT)

I. Patient Identification Data

- **Name:**
- **Age:**
- **Sex:**
- **Hospital/OP Number:**
- **Date of Admission/Assessment:**
- **Informant & Reliability:**
- **Address & Contact Info:**

II. Presenting Complaint(s)

- Chief complaints (Duration, Onset)

III. History of Present Illness

IV. Birth History

- **Antenatal history**
- **Intranatal history**
- **Postnatal history**

V. Developmental History

- **Gross motor**
- **Fine motor**
- **Language**
- **Social**

VI. Nutritional History

- **Type of feeding (exclusive breastfeeding, weaning age, diet pattern)**
- **24-hour dietary recall**
- **Feeding problems**

- **Appetite**

VII. Immunization History

VIII. Family History

- **Consanguinity**
- **Growth pattern in family**
- **Genetic disorders or chronic illnesses**

IX. Socioeconomic History

- **Modified Kuppuswamy Scale / B.G. Prasad scale**
- **Housing, sanitation, parental education, income**

X. Physical Examination

- **General Examination:**
    - Appearance
    - Pallor, icterus, cyanosis, clubbing, lymphadenopathy, edema
- **Vitals:**
    - Temperature
    - Pulse
    - Respiratory Rate
    - BP

XI. Anthropometric Measurements

Parameter	**Measurement Percentile / Z-score Interpretation**
Weight	

Parameter **Measurement Percentile / Z-score Interpretation**

Length/Height

Head Circumference

Chest Circumference

Mid-Upper Arm Circumference (MUAC)

BMI

- Plot on **WHO/IAP Growth Charts** (weight-for-age, height-for-age, weight-for-height, BMI-for-age)
- Assess for **stunting / wasting / underweight / overweight**

XII. Systemic Examination

- **CNS**
- **RS**
- **CVS**
- **Abdomen**

XIII- Ayurveda examination

- **Agni**
- **Abhyavaharana sakti**
- **Koshta**
- **General dosha status**
- **Dhatu status**

NO	MAJOR OBSERVATIONS AND SYMPTOMS	DOOSHYA	DOSHA

XIV. Summary and Growth Assessment

- **Growth Status** (Normal / Stunted / Wasted / Obese, etc.)
- **Developmental Status** (Normal / Delayed)
- **Nutritional Status**
- **Any suspected syndromes or chronic illness**
- **Plan of Management** (if any)

XV. Provisional/Final Diagnosis

XVI. Plan of Action / Recommendations

- Nutritional counselling
- Further investigations (if indicated)
- Follow-up plan

NAME & SIGNATURE OF TEACHER **NAME & SIGNATURE OF STUDENT**

DEVELOPMENTAL DISORDER CASE SHEET

PRELIMINARY DATA

Name of the child : Age :

Date of birth

Religion and Caste Nationality

Education Leve Mother tongue/Language Spoken

Referred by

Father's Name

Education Level of the Father occupation

Education Level of the Mother Occupation

Total family income

Socio Economic Status- Low/middle/high Locality Rural/Urban/Slum

Home address

Telephone Number

Email

INFORMANTS DETAILS

Informant's name and relationship with the child

Duration of the contact with the child

Reliability and Adequacy of the information

PRESENTING COMPLAINTS

PREVIOUS INTERVENTIONS

Details of previous interventions

Previous diagnosis if any

Drugs

CHILDHOOD HISTORY

Prenatal history

Natal and neonatal history

Post natal history

Immunization history

DEVELOPMENTAL HISTORY

Gross motor milestones

DEVELOPMENT MILESTONE	ESTBLISHED OR NOT	ESTABLISHED AT
Head holding		
Sit steadily with straight back		
Crawling		
Stand holding furniture		
Walk well without support		
Runs well		
Climb stairs with full coordination		
Jumps on one foot		

Fine motor milestones

DEVELOPMENT MILESTONE	ESTBLISHED OR NOT	ESTABLISHED AT
Follows the moving objects		
Grasp object crudely		
Reaches to grasp		
Transfer object one hand to another		
Clap hands		
Scribbles spontaneously		
Draws circles		
Draws recognizable man		

Language milestone

DEVELOPMENT MILESTONE	ESTBLISHED OR NOT	ESTABLISHED AT
Laugh loud		
Response to name		
Speaks ‘mama’		

Understand spoken speech		
Speak about 15 words		
Combines two words		
Simple sentence made		
Define words		

Personal and social behaviour

DEVELOPMENT MILESTONE	ESTBLISHED OR NOT	ESTABLISHED AT
Social smile		
Recognizes mother		
Smiles back mirror image of self		
Resist pulling away of toys and tries to reach		
Echolalia		
Toilet training started		
Can undress and dress with help		
Dresses without supervision		

HANDEDNESS

EMOTIONAL AND BEHAVIOR PROBLEMS

SCHOOL HISTORY

- Attended /Not attended/ Discontinued
- Nature of school- Normal/Special/Integrated/Inclusive/Others
- Address of the school
- Age at joining
- Attendance – Regular/Irregular
- Reasons for irregularity
- Class/ section
- Frequency and reasons for change of schools
- Scholastic performance - Good/Never failed/Average/Below average/Poor/Failed
- Peer group adjustment
- Teachers report
    - Scholastic performance- Good/fair/Poor/Not known
    - Class Room Behavior- Favorable/unfavorable/Not known

PLAY(Information from the parent /Guardian)

Normal Yes/No a

Indifferent/Enjoys play Yes/No

Plays most of the time Yes/No

Prefers to play with animals Yes/No

Prefers to play alone Yes/No

Prefers to play with older/Younger peer group

Behavior at play and in group situations

Play games governed by rules

Leisure time activities

SEXUAL HISTORY

Attained puberty

Age of puberty

General sexual behavior

FAMILY HISTORY

HOME AND SOCIAL ENVIRONMENT

- Parental involvement
- Personal needs of the child
- Educational activities
- Play and leisure activities
- Family size
- Involvement of family members with the child
- Neighborhood interaction
- Religious activities
- Social activities
- Support from family

SENSORY AND PHYSICAL EXAMINATION

Sensory behavior

General physical examination

Relevant short systemic examination

AWARENESS AND MISCONCEPTION

EXPECTATIONS

DEPARTMENT OF PHYSIOTHERAPY

DEPARTMENT OF OCCUPATIONAL THERAPY

DEPARTMENT OF SPEECH THERAPY

DEPARTMENT OF PSYCHOLOGY

DEPARTMENT OF SPECIAL EDUCATION

DEPARTMENT OF AYURVEDA

VIKRUTI PAREEKSHA :

FACTOR	OBSERVATION	MAJOR DOSHA
TWAK		
KOSTHA		
AGNI		
MOOD/TEMPERMENT		
TALKING STYLE		
USUAL AFFINITY & USAGE OF RASA		
SYMPTOM AGGRAVATION WITH DESHA , KALA , AHARA		
SYMPTOM REACTIION TO USHNA ,SEETA, SNIGDHA & ROOKSHA		
ORAL CAVITY		
KESA		
DANTA		
NAKHA		
NETRA		
JIHWA		
COMPLEXION		
LOCAL EXAMINATION		

VIKRUTI PAREEKSHA- SYMPTOM ANALYSIS:

NO	MAJOR OBSERVATIONS AND SYMPTOMS	DOOSHYA	DOSHA

PREDOMINANT DOSHA :

PREDOMINANT DUSHYA:

SAMPRAPTI

UPASAYA AND ANUPASAYA :

PROVISIONAL DIAGNOSIS

MANAGEMENT PLAN

SIGNATURE OF THE STUDENT

SIGNATURE OF THE FACULTY

NUTRITIONAL STATUS ASSESSMENT CASE SHEET

I. Patient Details

- **Name:**
- **Age:**
- **Sex:**
- **OP/IP Number:**
- **Date of Assessment:**
- **Informant (parent/guardian) & Reliability:**
- **Address and Contact Info:**

II. Chief Complaints

III. History of Present Illness

IV. Past Medical History

- Recurrent infections (diarrhea, RURTI, etc.)
- Hospitalizations
- Chronic diseases (e.g., TB, HIV, renal disease)

V. Birth and Developmental History

- Birth weight, gestational age
- Developmental History

VI. Feeding History

- **Breastfeeding**: Exclusivity, duration
- **Bottle feeding**: Frequency, hygiene
- **Weaning**: Age started, types of food introduced
- **Dietary Recall (24-Hour)**:

- **Frequency of Meals:**
- **Picky Eating / Feeding Problems:**
- **Appetite:**

VII. Immunization History

- As per National / IAP Schedule
- Vitamin A supplementation – Yes/No

VIII. Family and Socioeconomic History

- Family income and education
- Occupation of parents
- Sanitation, drinking water source
- Housing condition
- Food security

IX. General Examination

- **Pallor**
- **Hair changes (e.g., sparse, discolored)**
- **Skin changes (e.g., dermatitis, depigmentation)**
- **Edema (especially feet)**
- **Visible wasting**

- **Oral changes (angular stomatitis, glossitis)**
- **Eye signs (Bitot's spot, xerosis)**

X. Anthropometric Measurements

Parameter	**Measurement**	**Reference**	**Interpretation**
Weight		WHO/IAP	
Length/Height		WHO/IAP	
MUAC		<12.5 cm (SAM)	
Head Circumference (for <5 yrs)			
Chest Circumference (for <5 yrs)			
BMI (if >2 years)		WHO growth charts	
Weight-for-age Z-score		WHO	
Height-for-age Z-score		WHO	
Weight-for-height Z-score		WHO	

- Use **WHO Growth Standards (0–5 years)** or **IAP Growth Charts (5–18 years)**
- Classify based on **Z-scores**:
    - Moderate Acute Malnutrition (MAM): WHZ between –2 and –3
    - Severe Acute Malnutrition (SAM): WHZ < –3 or MUAC < 11.5 cm with clinical signs
    - Stunting: HAZ < –2
    - Underweight: WAZ < –2

XI. Systemic Examination

- Any findings suggestive of complications from malnutrition:
    - **CNS:** Irritability, apathy
    - **Abdomen:** Hepatomegaly (Kwashiorkor)
    - **Cardiac:** Tachycardia, hypotension
    - **Respiratory:** Signs of infection

XII. Nutritional Classification

- Based on WHO / IAP criteria:
    - Normal
    - Moderate Acute Malnutrition (MAM)
    - Severe Acute Malnutrition (SAM)
    - Stunting / Underweight / Overweight / Obese

XIII. Investigations (if applicable)

- CBC (Anemia)
- Serum proteins (Albumin)
- Electrolytes
- Stool for parasites
- HIV, TB screening if indicated

XIV. Ayurveda analysis

NO	MAJOR OBSERVATIONS AND SYMPTOMS	DOOSHYA	DOSHA

XIV. Management Plan

- **Dietary counselling**
    - **Ahara niyamas**
    - **Ahara prescription**
- **Micronutrient supplementation:**
- **Medical treatment:**
    - Deepana drugs
    - Pachana drugs
    - Krimihara drugs
    - Brimhana drugs
    - Rasayana drugs
- **Follow-up schedule**
- **Referral to NRC (Nutritional Rehabilitation Centre)** if required

XV. Summary and Remarks

- Final Nutritional Diagnosis
- Risk factors identified
- Recommendations for caregiver

SIGNATURE OF THE STUDENT **SIGNATURE OF THE TEACHER**

SROTO VIKARA CASE SHEET

PRELIMINARY DATA :

Name of the child : **Age :**

Name of the Parent:

Address of Parent :

Religion & Caste:

Occupation of Parent :

Monthly income :

Informant and His/her reliability: **Ward :** **Bed :**

Date of Admission : **UHID** **Contact Number**

Date of Discharge :

Presenting Complaints & Duration:

History of Present illness:

Past medical History

Birth History :

1. **Antenatal :**

2. **Natal:**

3. **Postnatal:**

Developmental History

Family History :

Social History :

Nutritional History :

Immunization History :

Personal History:

Diet **Appetite:**

Bowel: **Micturition:**

Sleep:

EXAMINATION :

GENERAL PHYSICAL EXAMINATION:

Vital signs

Temp: Pulse : BP : HR: RR:

ANTHROPOMETRY :

Weight : Height : HC: CC: Span : US/LS ratio:

MUAC

GENERAL APPEARANCE

Nutritional status

Pallor

Cyanosis

Jaundice

Clubbing

Edema

DETAILED PHYSICAL EXAMINATION :

Head and Face :

Mouth and Throat :

Cry/Voice:

Skin/ mucous membrane :

Hair /Nail :

Lymph nodes :

Eyes

Ear

Nose

Teeth

Tongue

Neck

Chest

Abdomen :

Extremities :

External genitalia

SYSTEMIC EXAMINATION

VIKRUTI PAREEKSHA :

FACTOR	OBSERVATION	MAJOR DOSHA
TWAK		
KOSTHA		
AGNI		
MOOD/TEMPERMENT		
TALKING STYLE		
USUAL AFFINITY & USAGE OF RASA		

SYMPTOM AGGRAVATION WITH DESHA , KALA , AHARA		
SYMPTOM REACTIION TO USHNA ,SEETA, SNIGDHA & ROOKSHA		
ORAL CAVITY		
KESA		
DANTA		
NAKHA		
NETRA		
JIHWA		
COMPLEXION		
LOCAL EXAMINATION		

VIKRUTI PAREEKSHA SYMPTOM ANALYSIS:

NO	MAJOR OBSERVATIONS AND SYMPTOMS	DOOSHYA	DOSHA

PREDOMINANT DOSHA :

PREDOMINANT DUSHYA:

SAMPRAPTI :

UPASHAYA AND ANUPASHAYA :

PROVISIONAL DIAGNOSIS:

INVESTIGATIONS :

ROGA NIRNAYA (FINAL DIAGNOSIS) :

SADHYA SADYATA (PROGNOSIS)

UPADRAVA (COMPLICATION)

CHIKITSA (TREATMENT)

CHIKITSA SOOTRAM :

DATE	CLINICAL CONDITION	MEDICINE / INTERVENTION	DOSAGE	REMARKS

KARYAPHALA (RESULT):

ADVICE ON DISCHARGE :

DISCHARGE MEDICINE :

APATHYA AHARA AND VIHARA:

PATHYA AHARA AND VIHARA:

NAME & SIGNATURE OF TEACHER **NAME & SIGNATURE OF STUDENT**

COURSE CURRICULUM FOR THIRD PROFESSIONAL BAMS
(PRESCRIBED BY NCISM)



Samhita Adhyayan-3
(Study of Ayurveda Classical Text)

(SUBJECT CODE : AyUG-SA3)

(Applicable from 2021-22 batch, from the academic year 2024-25 onwards for 5 batches or until further notification by NCISM, whichever is earlier)

ncism

।। आयुषे सर्वलोकानाम् ।।

BOARD OF AYURVEDA
NATIONAL COMMISSION FOR INDIAN SYSTEM OF MEDICINE
NEW DELHI-110026

NCISM

III Professional Ayurvedacharya (BAMS)

Subject Code : AyUG-SA3

Samhita Adhyayan-3

(Study of Ayurveda Classical Text)

Summary

Total number of Teaching hours: 150			
Lecture (LH) - Theory		**50**	**50(LH)**
Paper I	50		
Non-Lecture (NLHT)		**100**	**100(NLH)**
Paper I	100		
Non-Lecture (NLHP)		**0**	
Paper I	0		

Examination (Papers & Mark Distribution)					
Item	**Theory Component Marks**	**Practical Component Marks**			
		Practical	**Viva**	**Elective**	**IA**
Paper I	100	-	75	10 (Set-TC)	15
Sub-Total	100	100			
Total marks	200				

Important Note :- The User Manual III BAMS is a valuable resource that provides comprehensive details about the curriculum file. It will help you understand and implement the curriculum. Please read the User Manual III before reading this curriculum file. The curriculum file has been thoroughly reviewed and verified for accuracy. However, if you find any discrepancies, please note that the contents related to the MSE should be considered authentic. In case of difficulty and questions regarding curriculum write to **syllabus24ayu@ncismindia.org**

PREFACE

Samhita Adhyayan-3 (SA-3) is designed to enhance students' understanding of Ayurvedic classical texts by focusing on their textual structure, explanatory methods, and clinical applications. Recognizing the Charaka Samhita's vast contributions, SA-3 takes it as a model text. This curriculum revision ensures that students not only appreciate the traditional and classical significance of Samhitas but also apply their principles in clinical practice. A key focus is on decoding tools such as Tantrayukti and Vyakhya, which aid in comprehending the structured presentation of Ayurvedic knowledge.

The curriculum integrates innovative teaching methods, blending ancient learning approaches like Patha (recitation), Avabodha (comprehension), and Anushthana (application and evaluation) with modern clinical skill development. The content comprises 54 chapters from Charaka Samhita Uttarardha, including Chikitsasthana, Kalpasthana, and Siddhisthana, ensuring a comprehensive grasp of Ayurvedic treatment principles, detoxification therapies, and procedural mastery. Each chapter follows a structured approach, beginning with Adhyaya Parichaya (introduction), Siddhanta-Vivarana (explanation of key principles), and Adhyaya Samgraha (summary) to help students systematically understand the text.

To encourage active learning, SA-3 incorporates practical, research-oriented activities, such as applying Tantrayukti, analyzing commentaries (Vyakhya), comparing Samhita concepts, evaluating Panchakarma procedures in clinical settings, and engaging in manuscript studies. Additional activities like case studies, flipped classroom discussions, and practitioner interviews bridge theoretical knowledge with real-world practice. This approach ensures that students develop strong interpretative skills, practical expertise, and a deeper appreciation of Ayurvedic wisdom, preparing them for both academic and clinical excellence.

INDEX

Course Code and Name of Course 5
Table 1 : Course learning outcomes and mapped PO 5
Table 2 : Contents of Course 6
Paper 1 6
Table 3 : Learning objectives of Course 21
Paper 1 21
Table 4 : NLHT Activity 90
Table 5 : List of Practicals 94
Table 6 : Assessment Summary: Assessment is subdivided in A to H points 95
6 A : Number of Papers and Marks Distribution 95
6 B : Scheme of Assessment (Formative and Summative) 95
6 C : Calculation Method for Internal assessment Marks 95
6 D : Evaluation Methods for Periodical Assessment 96
6 E : Question Paper Pattern 97
6 F : Distribution of theory examination 98
Paper 1 98
6 G : Instructions for UG Paper Setting & Blue print 100
6 H : Distribution of Practical Exam 101
References Books/ Resources 102
Syllabus Committee 105
Abbreviations 110

Course Code and Name of Course

Course code	Name of Course
AyUG-SA3	Samhita Adhyayan-3

Table 1 : Course learning outcomes and mapped PO

SR1 CO No	A1 Course learning Outcomes (CO) AyUG-SA3 At the end of the course AyUG-SA3, the students should be able to-	B1 Course learning Outcomes mapped with program learning outcomes.
CO1	Justify the methodology of structuring Samhitas and assess the importance of decoding Samhitas using Tantrayukti and Vyakhya.	PO2,PO9
CO2	Apply Samhita Sutras for clinical decision-making in patient care.	PO1,PO3
CO3	Interpret stage-wise treatment plans based on the principles outlined in Samhitas.	PO3,PO5
CO4	Appraise Rasayana and Vajikarana, its significance in health promotion and management of diseases.	PO1,PO5
CO5	Evaluate therapeutic procedures and identify potential complications along with their management.	PO4,PO5
CO6	Analyze the principles for appropriate selection of formulations and their application in Chikitsa.	PO3,PO5
CO7	Recognize the importance of Samhita-based practices in achieving positive therapeutic outcomes, supported by research evidence and clinical studies that validate traditional methodologies and their efficacy in contemporary healthcare.	PO5,PO6,PO7
CO8	Develop and implement ethical principles, moral values, and effective communication skills as healthcare professionals.	PO1,PO8,PO9

Table 2 : Contents of Course

Paper 1 (Samhita Adhyayan - 3)						
Sr. No	**A2 List of Topics**	**B2 Term**	**C2 Marks**	**D2 Lecture hours**	**E2 Non-Lecture hours Theory**	**E2 Non-Lecture hours Practical**
1	**Cha.Chi.1.Rasayana Adhyaya** **1. Abhayamalakiya Rasayana Pada** 1.1. Bheshaja Paryaya, classification of medicines (Bheshaja & Abheshaja Prakara), benefits of Rasayana and Vajikarana, and detailed types of Rasayana. 1.2 Indications and contraindications of Haritaki Prayoga and key formulations like Brahma Rasayana, Chyawanaprasha, and Haritaki Yoga. **2. Pranakamiya Rasayana Pada** 2.1 Gramya Ahara & Vihara and their effects on health. 2.2. Rasayana Yogas - Amalaki Rasayana, Nagabala Rasayana, and Bhallataka Rasayana. **3. Karapratichitiya Rasayana Pada** 3.1Amalakayasa Rasayana Kevala Amalaka Rasayana, Lauhadi Rasayana, Medhya Rasayana, Pippali Rasayana, Pippali Vardhaman Rasayana, Triphala Rasayana, and Shilajatu Rasayana. **4. Ayurveda Samutthaniya Rasayana Pada** 4.1 Indrokta Rasayana and Achara Rasayana 4.2 Importance of Pranacharya Vaidya, ethical aspects of Chikitsa.	1	40	1	0	0
2	**Cha.Chi. 2.Vajikarana Adhyaya** **1. Samyogasharamuliya Vajikaran Pada** 1.1. Importance of Vajikarana	1		1	0	0

	1.2. Various Vajikarana Yoga -Brumhani Gutika, Vajikarana Ghrita Vrushya Yoga, etc. **2.Asikta Ksheerik Vajikaran Pada** 2.1 Vrukshya Ksheera, Vrushya Dadhisara, Vrushya shashtika Odan etc. **3. Mashaparnabhritiya Vajikaran Pada.** 3.1Specific cow's milk for Vajikaran, Shatavari ghrita etc. **4.Pumanjatabaladikam Vajikaran Pada.** 4.1 Shukra Pravritti, Prashasta ShukraGuna 4.2 Vajikarana Nirukti					
3	**Cha. Chi .3. Jwara Chikitsitam** 1. Jwara Prakruti, Pravritti, Prabhava, Poorvarupa, Adhishthana, Pratyatma Lakshana. 2. Jwara classification, Jwara Samanya Samprapti Lakshana, Sadhyasadhyata. 3. Jwara Chikitsa Sutra, Tarun Jwara Chikitsa Sutra, Dhatugata Jwara Chikitsa Sutra, Samsrustha Jwara Chikitsa Sutra, Sannipataj Jwara Chikitsa Sutra. 4. Vishama Jwara Chikitsa, Punaravartak Jwara Chikitsa Sutra, Shadanga Paneeya, ten types of Yavagupaan in Jwara. 5. Ghruta Prayoga, Ksheera Prayoga in Jeerna Jwara, Samshodhan Chikitsa, Daivavyapashraya Chikitsa in Jwara.	1		2	0	0
4	**Cha. Chi.4.Raktapitta Chikitsitam** 1.Raktapitta Hetu, Samanya Samprapti, Lakshana, Sadhyasadhyata, Doshanusara Raktapitta Lakshana, Sadhyasadhyata. 2.Gati Bheden Sadhyasadhyata of Raktapitta, Raktapitta Chikitsa Sutra. 3.Gudagata Raktapitta Chikitsa, Nasagata	1		1	0	0

	Raktapitta Chikitsa. 4. Raktapitta Shamana Yoga, Vasa Ghrita, Shatavaryadi Ghrita.					
5	**Cha. Chi .5. Gulma Chikitsitam** 1. Gulma Hetu, Samanya Samprapti, Lakshana and Sadhyasadhyata 2.Gulma types, their Lakshana and Chikitsa 3.Gulma Chikitsa Yoga such as Tryushanadi Ghrita, Hingu-Saurvachaladya Ghrita, Pippalyadya Ghrita, Ksheerashatpala Ghrita, Mishraka Sneha etc.	1		1	0	0
6	**Cha.Chi. 6. Prameha Chikitsitam** 1.Prameha Hetu, Samanya Samprapti, Sankhya Samprapti, Poorvarupa, Lakshana and Sadhyasadhyata. 2.Prameha Chikitsa Sutra. 3.Different types of Kwatha Prayoga in Kaphaj Prameha, Pittaj Prameh. 4.Prameha Chikitsa Yoga Such as Phalatrikadi Kwath,Madhvasava, Peya Prayoga, etc.	1		1	0	0
7	**Cha. Chi.7.Kushtha Chikitsitam** 1.Kushtha Hetu, Samanya Samprapti, Sankhya Samprapti, Lakshana and Sadhyasadhyata 2.Kushtha Samanya Chikitsa Sutra 3.Kushtha Chikitsa Yoga such as Madhvasava, Kanakabindvarishta, Siddharthaka Yoga, Various types of Lepa, Tiktashatpala Ghrita, Mahatiktaka Ghrita, Mahakhadira Ghrita, etc. 4.Shwitra and Kilasa hetu, Lakshana and Chikitsa	1		1	0	0
8	**Cha.Chi 8.Rajayakshma Chikitsitam** 1.Rajayakshma Chatvari Aayatanani, Samanya Samprapti, Lakshana.	1		1	0	0

	2.Purvarupa of Rajyakshma. 3.Rajayakshma Trirupa, Shadrupa, Ekadasharupa 4. Rajayakshma Chikitsa Sutra 5. Rajayakshma Chikitsa Yoga such as Yavani Shadava, Sitopaladi,Talishadya yoga, Jivantyadi Ghrita etc. Jugupsa Chikitsa.					
9	**Cha. Chi.9.Unmada Chikitsitam** 1. Unmada Hetu, Samanya Samprapti, Samanya Lakshana. 2.Unmada Bhedha, Vataj, Pittaj, Kaphaj, Sannipataj, Agantuj Unmad Lakshana. 3.Unmada Chikitsa Sutra, Agantuja Unmada Hetu, Agantuja Unmada Chikitsa. 4.Vigata Unmada Lakshana, Unmada Chikitsa Yoga. 5. Kalyanaka Ghrita, Mahakalyanaka Ghrita, Mahapaishachika Ghrita, Lashunadya Ghrita, Purana Ghrita, Siddharthaka Yoga.	1		1	0	0
10	**Cha.Chi.10.Apasmara Chikitsitam** 1.Apasmar hetu, Samanya Samprapti, Samanya Lakshana. 2.Apsmar bheda,their lakshana, and Sadhyaasadhyata. 3 Apasmar Samanya Chikitsa Sutra 4.Apasmar - Chikitsa Yoga such as Panchagavya Ghrita, Mahapanchagavya Ghrita, Brahmi Ghruta etc. 5.Atattvabhinivesha hetu,Lakshana, Chikitsa	1		1	0	0
11	**Cha. Chi.11.Kshataksheena Chikitsitam** 1. Kshataksheena Hetu, Samprapti, Poorvarupa, Lakshana and Sadhyaasadhyata 2. Kshataksheena Chikitsa 3. Shaman yogas such as Lakshadi yoga, Eladi	1		1	0	0

	Gutika, Amruta prasha Gruta, Sarpi Guda,Nagabala Rasayana etc.					
12	**Cha. Chi. 12.Shwayathu Chikitsitam** 1. Shwayathu Bheda, Nidana, Samprapti, 2. Samanya Lakshana and Sadhyasadhyata 3. Vataja, Pittaja, Kaphaja Shotha Lakshana 4. Shwayathu Chikitsa according to Avastha and according to Dosha-Pradhanya 5. Chikitsa Yoga Gandiradyarishta, Ashtashatarishta, Punarnavadyarishta, Kamsaharitaki,Ksharagutika, 6. Eka Deshaja Shotha	1		1	0	0
13	**Cha. Chi.13.Udara Chikitsitam** Udara Roga Samanya Hetu, Purvarupa, Samprapti, Samanya Lakshana and Sadhyaasadhyata Ashtodara and their Hetu, Samprapti and Lakshana Samanya and Avasthika (according to Dosha predominance) Chikitsa of Udara Roga Shaman Yogas such as Takraprayoga, Kshiraprayoga, Narayana Churna, etc.	1		1	0	0
14	**Cha. Chi.14.Arsha Chikitsitam** 1.Types of Arsha, Adhisthan, Samsthan of Arshas, Purvarupa. 2.Nidan, Lakshan, Saadhyaasadhyata of Arshas based on dosha predominance. 3.Arsha Chikitsa, Ardra Arsha Chikitsa. 4.Lakshana and Chikitsa of Raktaj Arshas in association with dosha, Importance of Takra in Arsha. 5. Shamana Yoga, Takrarishta, Abhayarishta, Dantyarishta, Phalarishta, Kanakarishta, Kutajadi Rasakriya, Piccha Basti.	1		1	0	0
15	**Cha. Chi.15.Grahani dosha Chikitsitam** 1.Ajeerna: Hetu and Lakshana.	1		2	0	0

	2. Grahani: Purvarupa, Lakshana, Prakruta Karma, and Bheda with Vataja, Pittaja, Kaphaja, Sannipataja variants, including Hetu, Lakshana, and Chikitsa. 3.Takra Prayoga, Takrarishta Yoga, and the significance of Sneha Prayoga in Mandagni. 4. Agni: Factors affecting it, Atyagni Samprapti, Lakshana, and Chikitsa. 5. Shamana Yogas: Dasamuladya Ghrita, Chitrakadi Vati, Trayushanadya Ghrita, Panchamuladya Ghrita, Bhunimbadya Churna, Mudhukaasava, Pindaasava, Mulaasava, Madhvaarishta.					
16	**Cha. Chi.16.Panduroga Chikitsitam** 1.Panduroga Bheda, Hetu, Samprapti, Purvarupa, Samanya Lakshana. 2.Vataja, Pittaja, Kaphaja, Tridoshaja, Mridbhakshanajanya Panduroga Hetu, Lakshana, Sadhyasadhyata. 3. Panduroga Samanya Chikitsa, Doshanusara Chikitsa. 4. Kamala Bheda, Lakshana, Chikitsa, Halimaka Lakshana, Chikitsa. 5. Shaman Yogas, Navayasa Churna, Mandura Vataak, Yogaraj, Dadimadya Ghruta, Punarnava Mandura.	1		1	0	0
17	**Term 1 Non Lecture theory Activities** Activities to be conducted in the entire term 1.	1		0	34	0
18	**Cha Chi.17.Hikka Shwasa Chikitsitam** 1.Hikka Shwasa Hetu, Samanya Samprapti, Purvarupa. 2.Hikka types, Vishesha Lakshana, Sadhyasadhyata, Shwasa types, Vishesha Lakshana, Sadhyasadhyata.	2	30	1	0	0

	3. Hikka Shwasa Samanya Chikitsa, Dhumapaan, Nasya Prayoga. 4.Shaman Yogas, Shatyadi Churna, Muktadya Churna, Dashamuladya Ghrita. **5.**Manasheeladi Ghrita, Tejovatyadi Ghrita.					
19	**Cha. Chi.18.Kasa Chikitsitam** 1.Kasa bhedha, Purvarupa, Samprapti. 2.Vataj kasa, Pittaj Kasa, Kaphaj Kasa,Kshataj Kasa and Kshayaj Kasa , their hetu, Samprapti, Lakshana and Chikitsa. 3. Shaman yogas such as Kantakari Ghrita, pippalyadya Ghrita, Trayushanadya Ghrita, Agastya Haritaki, Guduchayadi Ghrita	2		1	0	0
20	**Cha. Chi.19.Atisara Chikitsitam** 1.Hetu, Samprapti, Lakshana, Chikitsa of Vata Atisara, Pitta Atisara, Kapha Atisara, Tridoshajatisara (Sannipatatisara), Agantuja Atisara, Amaj Atisara. 2. Agantu Atisara Samanya Chikitsa, Pramatya Prayoga in Madhyama Dosha of Atisara. 3. Sangrahi Aoushadhi Nishedha, Samanya Chikitsa in Aamatisara, Takra Prayoga, Mamsa Prayoga, Khada Yusha Prayoga in Atisara. 4. Guda Bhramsha Chikitsa, Piccha Basti Prayoga, Sannipataj Atisara Chikitsa. 5.Shamana Yogas, Changeri Ghruta, Chavya Ghruta, Dashamoola Ghruta, Dravyadi Ghruta.	2		1	0	0
21	**Cha. Chi.20.Chhardi Chikitsitam** 1.Chhardi Bheda, Purvarupa, 2.Chhardi Bhedanusarena Hetu, Samprapti and Lakshana, Sadhyasadhyata , and Chikitsa sutra. 3. Chhardi Samanya Chikitsa	2		1	0	0

	4. Jeerana Chhardi lakshana and Chikitsa				
22	**Cha. Chi.21.Visarpa Chikitsitam** 1.Visarpa Vyakhya, Bheda, Sapta Dravya Samgrah, Visarpa Hetu, Samprapti, Lakshana according to Dosha-Pradhanya, Chikitsa. 2.Sthananusara 3.Visarpa Bheda, Lakshana, Sadhyasadhyata, Chikitsa, Upadrava Vyakhya. Visarpa Samanya Chikitsa, Importance of Raktamokshana, Bahiparimarjana Chikitsa. 4.Importance of Pradeha, Pralepa Yogas in Visarpa. 5.Pathya and Apathya Ahara in Visarpa.	2	1	0	0
23	**Cha. Chi.22.Trishna Chikitsitam** 1.Trushnaroga Hetu, Samprapti,Purvarupa, Samanya Lakshana 2.Lakshana and chikitsa sutra of Vata-Pitta-Kapha-Aamaja-Kshyaja-Upasargaja Trushnaroga. 3. Indications for Sheetajalapaan and Ushna jala paan 3. Significance of Endra Jala, Trunapanchamula Sadhita Jala. Dhanyaambu	2	1	0	0
24	**Cha. Chi.23.Visha Chikitsitam** 1.Visha types, Visha guna, Gara visha and Dushi Visha. Lakshana, Chikitsa. 2.Enumerate Visha upakram. 3.Shankha visha lakshana and Chikitsa. 4. Shaman yogas Mritasanjivana Agad. Kshara Agad, Grihadhumadi yoga, Mahagandhahasti agad, Chandanadi yoga, Amruta ghruta	2	1	0	0
25	**Cha.Chi.24.Madatyaya Chikitsitam**	2	1	0	0

	1. Definition of Mada, Stages of Madatyaya 2.Types of Madatyaya and their Hetu, Lakshna and Samprapti, Chikitsa Sutra 3.Shat-trik 4. Dhwamsaka and vikshaya Lakshana and Chikitsa 5. Shamana Yogas, Astanga Lavana, Kshira Prayoga, etc					
26	**Cha.Chi.25.Dwivraniya Chikitsitam** 1.Enumerate Vrana bhedha, Vrana sthana, Gandha, Srava, Upadrava, dosha. 2.Sadhyaasadhyata and Chikitsa of vrana.	2		1	0	0
27	**Cha. Chi.26. Trimarmiya Chikitsitam** 1.Nidan, Lakshana and Chikitsa of Udavarta 2.Enumerate Mutrakrichra, Pratishyaya, Shiroroga, Arochaka. 3.Nidan, Bhedha, Lakshana and Chikitsa of Hridroga. 4. Shamana Yogas Sahacharataila, Mahanila taila, Dviruttara hingvada churna, Hinguvachadi Churna, Pasanabhedadi ghrita, Pushkarmuladi Kvatha. 5.Significance of Tridosha.	2		1	0	0
28	**Cha.Chi.27.Urusthambha Chikitsitam** 1. Hetu, Purvarupa,Lakshana of Urusthambha. 2. Chikitsa Siddhanta of Urusthambha 3. Substantiate contraindication of Panchakarma in Urusthambha Chikitsa 4. Shaman yogas of Ashtakatvara Taila, Sharngeshtadi Churna	2		1	0	0
29	**Cha.Chi.28.Vatavyadhi Chikitsitam** 1.Samanya Nidan , Purvarupa, Lakshana and Chikitsa sutra.	2		2	0	0

	2.Sthana bhedha Kupita Vayu Lakshanas and Chikitsa. 3.Chikitsa Sutra of Ardhita, Pakshaghata, Gridhrisi , Khalli. 4.Avaran, Lakshana and Chikitsa. 5.Shaman yogas of Vatavyadhi Baladitaila, Rasnataila, Nirgundi taila, Sahachara taila, Amrutadya taila .					
30	**Cha.Chi.29.Vatashonita Chikitsitam** 1.Nidan, Samprapti, Purvarupa, Bhedha , Lakshana, Sadhyaaasadhyata and Upadrava of Vatashonita. 2.Utthan and Gambhira Vatashonita Chikitsa Sutra. 3.Significance of Ksheerabasti prayoga in Vatarakta. 4.Shaman yogas of Vatarakta- sukumara taila, madhuk tailam, Pinda tailam, Shtapaka and Sahasrapaka Bala tail.	2		1	0	0
31	**Cha.Chi.30.Yonivyapad Chiktsitam** 1.Yonivyapad types, Lakshana, Chikitsa, Shukra Dosha, Hetu, Lakshana, Chikitsa. 2.Shuddha Shukra Lakshana, Klaibya Bheda, Lakshana, Sadhyasadhyata, Chikitsa. 3.Pradara Hetu, Samprapti, Lakshana, Chikitsa. 4. Chikitsa Pariksha Vishayas, Anuktavyadhi Chikitsa, Aoushadhi Sevana Kala. 5. Importance of Pathya.	2		1	0	0
32	**Cha. Ka.1Madanakalpam** 1.Definition of Vaman, Virechana, Mode of Action, Trividha Desha Lakshana. 2.Aushadhi Samgrah Kaala, Vidhi, Shreshthata of Madanphala among Vamaka Dravyas. 3.Madhu, Saindhava Prayoga in Vamak Yogas, Madanaphala Sangraha, Prayoga Vidhi.	2	10	1	0	0

	4. Yogas of Madanaphala, Madanphala Ghreya Yoga. 5. Madanaphala Paryaya.					
33	**Cha.Ka.2 to 6** **Cha.Ka.2. Jimutaka Kalpam ,** **Cha.Ka.3. Ikshvaku Kalpam,** **Cha.Ka.4. Dhamargava Kalpam** **Cha,Ka.5. Vatsaka Kalpam,** **Cha.Ka.6. Kritavedhana Kalpam** 1.Paryaya and Guna of Jivamutak , Ikshvaku, Dhamargava . Vatsaka and Kritavedhana Kalpam. 2.Yogya Roga and Rogi for Jivamutak , Ikshvaku, Dhamargava . Vatsaka and Kritavedhana Kalpam. 3.Enumerate yogas of Jimutaka , Ikshvaku, Dhamargava ,Vatsaka, and Kritavedhana Kalpam.	2		1	0	0
34	**Cha.Ka.7.Shyamatrivrutta Kalpam** 1.Paryaya , Guna,Bheda,indications 2.Samgraha and prayoga vidhi. 3.Enumerate the Shyamatrivrita Yogas 4.Kalyanaka Guda, Vyoshadi Gutika ingredients and Indications. 5.Rutuanusruta Trivrita Prayoga.	2		1	0	0
35	**Cha.Ka.8. to 11** **Cha.Ka.8. Chaturangula Kalpam,** **Cha.Ka.9. Tilvaka Kalpam,** **Cha.Ka.10. Sudha Kalpam,** **Cha.Ka.11. Saptalashankhini Kalpam.**	2		1	0	0

	1.Paryaya, Gunas, Indications, Samgrah and Prayoga Vidhi of Chaturangula, Tilvaka, Sudha, Saptalashankhini. 2. Yogas of Chaturangula Kalpam, Tilvaka kalpam, Sudha Kalpam, Saptalashankhini Kalpam.					
36	**Cha.Chi.12.Dantidravanti Kalpam** 1.Paryaya,guna, Samgraha and Prayoga Vidhi . 2.Enumerate the Yogas of Danti Dravanti kalpam. 3.Guidelines for nomeclature of formulations. 4.Significance of Dravya Samyoga. 5.Characterstics of Mrudu, Madhyama and Teekshna Shodhan dravys . 6.Doshashesha Chikitsa. 7.Magadha Mana Paribhasha. 8.Trividha Snehapaka lakshana and their Usage	2		1	0	0
37	**Term 2 Non Lecture theory Activities** Activities to be conducted in the entire term 2.	2		0	33	0
38	**Cha. Si.1.Kalpana Siddhi** 1.Guidelines for Snehana, Swedana, Benefits of Snehana Swedana, Utkleshakara Ahara Dravyas before Vaman and Virechana. 2.Sansarjana Krama Vidhi, Samyak Yoga, Ayoga, Atiyoga Lakshana of Vamana, Virechana, Asthapana Basti, Anuvasana Basti, Shirovirechana. 3.Concept of Karma, Kala, Yoga Basti, Panchakarma Parihar Kala, Vishaya. 4. Basti Apratyagaman Hetu, Chikitsa. 5. Importance of Matra in Panchakarma Chikitsa.	3	20	1	0	0
39	**Cha.Si.2.Panchakarmiya Siddhi** 1.Anupakramya for Chikitsa 2.Yogya and Ayogya Rogi for Panchakrama with their reasons.	3		1	0	0

40	**Cha.Si.3.Bastisutriyam Siddhi** 1.Factors to be considered before administration of Basti. 2.Improper admnistration of Basti and Chikitsa. 3.Effects of Niruha-basti on Tridosha. 4.Pathya to be followed after Basti Karma. 5.Doshanusara Basti Kalpana.	3		1	0	0
41	**Cha. Si.4.Snehavyapat Siddhi** 1.Snehabasti Vyapat, its hetu, Lakashana and Chikitsa. 2.Matrabasti-Indications, dose and benefits 3.Pathya to be followed after Anuvasan Basti. 4.Pratidina Anuvasaneeya Basti yogya Purusha. 5.Matrabasti indications and its Importance.	3		1	0	0
42	**Cha.Si. 5.Netrabastivyapat Siddhi** 1.Basti netra dosha and its harmful effects. 2.Basti putak dosha and its harmful effects. 3.Bast Praneta dosha and its complications.	3		1	0	0
43	**Cha.Si.6.Vamana Virechana Vyapat Siddhi** 1. Indication of Shodhana in Sadharana Rutu, Pre-requisite for Samyak Yoga of Shodhana. 2. Importance of Matravat Aoushadhi, Tarpana Prayoga in Vaman and Virechana. 3. Jeerna Aoushadhi Lakshana, Ajeerna Aushadhi Lakshana. 4. Vaman-Virechana Vyapad, Hetu, Lakshana, Chikitsa.	3		1	0	0
44	**Cha. Si. 7.Bastivyapat Siddhi**	3		1	0	0

	1.Aasthapana Basti Vyapad, its Hetu, Lakshana and Chikitsa. 2.Basti Dravyas used for Mrudu and Teekshna Basti. 3.Basti Prabhav					
45	**Cha.Si.8.Prasrita Yogiyam Siddhi** 1.Various Prasritika-basti-yoga and their indications. 2.Permutation and Combination of Atisar , its Upadrava and Chikitsa. 3.Atisara Samanya Chikitsa Siddhant and Use of Ghruta and Yavagu Kalpana.	3		1	0	0
46	**Cha.Si.9.Trimarmiya Siddhi** 1.Importance of Trimarma, Trividha Marma Abhighata Lakshana, Chikitsa. 2. Apatantrak, Apatanak Samprapti, Lakshana, Chikitsa. 3. Tandra Hetu, Samprapti, Chikitsa. 4. Enumeration of Basti Rogas, Uttara Basti Vidhan. 5. Enumeration of Shirorogas, Importance of Nasya Karma, Types, Indications.	3		1	0	0
47	**Cha. Si. 10.Basti Siddhi** 1.Shresthata of Basti Karma. 2.Enumeration of Basti as per Doshaanusra and Vyadhianusara (Doshapratyaneeka and Vyadhi Pratyaneeka)	3		1	0	0
48	**Cha.Si.11.Phalamatra Siddhi** Understand the concept of Sadatura with its Hetu and Chikitsa.	3		1	0	0
49	**Cha.Si.12.Uttara Basti Siddhi** 1. Rasadi Samsarjana Krama, Benefits, Prakruti	3		1	0	0

	Prapta Purusha Lakshana. 2. Asta Mahadoshakara Bhavas, Karan, Lakshana, Chikitsa. 3. Definition, Benefits, Indications of Yapana Basti, Enumeration of Yapana Basti Kalpana. 4. Atiyog of Yapana Basti Effects, Management. 5. Definition of Siddhisthana, Samhita Adhyayan Phala, Definition, Karya of Pratisamskarta, Significance of Charaka Samhita.					
50	**Term 3 Non Lecture theory Activities** Activities to be conducted in the entire term 3.	3		0	33	0
Total Marks			**100**	**50**	**100**	**0**

Table 3 : Learning objectives of Course

Paper 1 (Samhita Adhyayan - 3)										
A3 Course out come	**B3 Learning Objective (At the end of the session, the students should be able to)**	**C3 Domain/sub**	**D3 MK / DK / NK**	**E3 Level**	**F3 T-L method**	**G3 Assessment**	**H3 Assessment Type**	**I3 Term**	**K3 Integration**	**L3 Type**
Topic 1 Cha.Chi.1.Rasayana Adhyaya (LH :1 NLHT: 0 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO1	Explain basic meaning of terms like Abheshaja, Vatatapika Rasayana, Kutipraveshika Rasayana, Aachara Rasayana, Pranakamiya, Yayavara.	CK	MK	KH	L&GD, BS	QZ ,VV-Viva,COM	F&S	I	-	LH
CO1	Enlist Bheshaja ParyayaClassify Bheshaja and Abheshaja (Cha.Chi.1/1/3-6)	CK	MK	K	L,BS,DIS	P-VIVA,T-CS	F&S	I	-	LH
CO1	Identify the examples of Abheshaja	CE	DK	KH	DIS,BS, TPW,L	QZ ,VV-Viva	F&S	I	-	LH
CO4	Describe the functions of Rasayana (Cha.Chi 1/1/7-8)	CC	MK	KH	L&GD	P-VIVA,T-CS	F&S	I	-	LH
CO4	Describe the functions of Vajikarana (Cha. Chi. 1/1/9-12)	CC	MK	KH	L&GD	P-VIVA,T-CS	F&S	I	-	LH
CO4	Differentieate between Rasayana and Vajikarana (Cha Chi.1/1/8-12)	CK	DK	KH	L&GD, BS	P-VIVA,DEB	F&S	I	-	LH
CO4	Discuss types of Rasayana - Kutipraveshika and Vatatapika (Cha.Chi. 1/1/16-23)	CC	DK	KH	L&GD, L&PPT	T-CS,P-VIVA	F&S	I	-	LH
CO4	Discuss Haritaki Prayoga in Rasayana Chikitsa (Cha.Chi 1/1/29-37)	CC	MK	K	L&GD, L&PPT	P-VIVA,T-CS	F&S	I	-	LH

CO4	Enlist Rasayana Yoga - Brahma Rasayana, Chyawanaprasha, Haritaki Yoga, Amalaka Rasayana (Cha.Chi. 1/1/41-79)	CK	DK	K	L&PPT	QZ ,T-CS,P-VIVA	F&S	I	-	LH
CO4	Define Gramya Aahara and Vihara and explain their Effects (Cha.Chi 1/2/3)	CC	DK	K	L&PPT ,DIS	T-CS,P-VIVA	F&S	I	-	LH
CO4	Describe Rasayana Yoga- Amalaka Rasayana, Nagabala Rasayana, Bhallataka Rasayana, (Cha .Chi 1/2/4-22)	CC	DK	K	TBL,L &PPT	PRN,T-CS	F&S	I	-	LH
CO4	Discuss Rasayana yoga - Amalakaayasa Brahma Rasayan, Kevala Amalaka Rasayana, ,Lauhadi Rasayana, Medhya Rasayana, Pippali Rasayana, Pippali Vardhamanm, Triphala Rasayana, Shilajatu Rasayana and Varjya during Shilajatu Prayoga.	CC	MK	K	GBL,L &PPT ,PER	T-CS,P-VIVA	F&S	I	-	LH
CO4	Discuss Kulathya Nishedha in Shilajatu Prayoga (Cha.Chi.1/3/62-64)	CC	DK	K	DIS	QZ ,P-VIVA	F&S	I	-	LH
CO4, CO8	Discuss Aachara Rasayana and its importance in current era. (Cha.Chi 1/4/30-35)	CAP	MK	KH	L&PPT ,BS,DIS ,CBL	CL-PR,DEB,P-VIVA,T-CS	F&S	I	-	LH
CO4, CO8	Discuss Aachara Rasayana and its importance in the modern era, along with the code of conduct for Bhishak.	CAP	MK	KH	BS,L&GD	P-VIVA,QZ	F&S	I	-	LH
Topic 2 Cha.Chi. 2.Vajikarana Adhyaya (LH :1 NLHT: 0 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO4	Discuss Pradhana Vajikarana (Cha chi 2/1/3-15)	CC	MK	K	BS,DIS, L&PPT	T-CS,P-VIVA	F&S	I	-	LH
CO4	Justify the importance of Vajikarana in current era (Cha Chi 2/1/16-23)	CAP	MK	KH	BS,DIS, L&GD	T-CS,P-VIVA	F&S	I	-	LH
CO4	Describe Various Vajikarana Yoga - Brumhani Gutika,	CK	NK	K	TPW,G	VV-Viva,T-	F&S	I	-	LH

	Vajikarana Ghrita, Vrushya Yoga.				BL	CS				
CO4	Enlist the attrubutes of Vrushya Dravya and explain Anukta Vajikarana Sangraha (Cha Chi 2/4/36-45)	CK	MK	K	L&PPT ,L&GD	P-VIVA,T-CS	F&S	I	-	LH
CO4	Define Vrushya ,Shukra-Pravrutti ,PrashastaShukra Guna,. Cha Chi 2/4/ 36, 46-49, 50	CC	MK	K	L&GD	P-VIVA,T-CS	F&S	I	-	LH
CO4	Discuss the yogas explained in the Asiktaksheerika Vajikaran yogas of Vrushya Ghruta, Vrushya DadhiSara, Vrushya Shashtika Odan.	CK	NK	K	L&PPT	P-VIVA,T-CS	F&S	I	-	LH
CO1	Discuss the Yogas and Specific cow's milk for vajikaran, Shatavari Ghruta, and other factors influencing vitality.	CK	NK	K	SDL	T-OBT	F&S	I	-	LH
CO4	Summarize the chapter based on sutra (Cha chi 2/4/52-53)	CK	NK	K	SDL,L, L&PPT	P-VIVA	F&S	I	-	LH
Topic 3 Cha. Chi .3. Jwara Chikitsitam (LH :2 NLHT: 0 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO1	Explain Jwara - Prakruti, Pravritti, Prabhava, Poorvarupa, Adhishthana, PratyatmaLakshana (Cha Chi 3/12-31)	CC	MK	K	L&PPT	T-CS,P-VIVA	F&S	I	-	LH
CO2	Outline the classification of Jwara (Cha.Chi 3/32-35)	CAP	MK	K	L&PPT	T-CS,P-VIVA	F&S	I	-	LH
CO2	Discuss Prakruta and Vaikruta Jwara (Cha.Chi 3/42-49)	CC	MK	KH	L&PPT	P-VIVA,T-CS	F&S	I	-	LH
CO2	Outline the Samprapti of Doshakalabalabalabheden Jwara Prakara (Cha.Chi 3/53-74)	CAP	MK	KH	L&PPT	T-CS,P-VIVA	F&S	I	-	LH
CO2	Enlist the Lakshana of Dhatugata Jwara (Cha.Chi 3/75-83)	CK	DK	K	L&PPT ,TBL	P-VIVA,QZ	F&S	I	-	LH

						,T-CS				
CO2	Enlist the Lakshana of Dvandvaja and SannipatajaJwara (Cha.Chi. 3/84-110)	CK	DK	K	L&PPT	T-CS,P-VIVA	F&S	I	-	LH
CO2	Enlist the Lakshana of Chaturvidha Agantuja Jwara (Cha.Chi 3/111-128)	CK	DK	K	L&PPT	T-CS,P-VIVA	F&S	I	-	LH
CO2	Outline the Samanya Samprapti of Jwara (Cha.Chi. 3/129-132)	CC	MK	KH	DIS,L&PPT ,BS	P-VIVA,T-CS	F&S	I	-	LH
CO2	Enlist the Lakshana of Ama, Pachyamana and Nirama Jwara (Cha.Chi. 3/132-137)	CK	DK	K	L&PPT	T-CS,P-VIVA	F&S	I	-	LH
CO3	Explain Taruna Jwara Chikitsa (Cha. Chi. 3/132-137)	CC	MK	KH	L&GD	P-VIVA,T-CS	F&S	I	-	LH
CO2, CO3	Determine the significance of Langhana in Taruna Jwara Chikitsa (Cha. Chi 3/139-141)	CAP	MK	KH	L&PPT ,L&GD	T-CS,P-CASE,P-VIVA	F&S	I	-	LH
CO3	Discuss Swedana, Kala, Yavagu Pana, Tiktaka Rasa in Taruna Jwara Chikitsa (Cha.Chi 3/142-162)	CAN	MK	KH	L&GD	T-CS,P-VIVA	F&S	I	-	LH
CO3	Enlist Jwaranashana Kashaya (Cha.Chi 3/197-218)	CK	MK	K	L&PPT ,TPW	P-VIVA,T-CS	F&S	I	-	LH
CO3, CO6	Describe Jeerna-Jwara Chikitsa (Cha.Chi. 3/291)	CC	MK	KH	L&PPT ,DIS,CBL	P-VIVA,CL-PR	F&S	I	-	LH
CO3, CO6	Explain Vishama-Jwara Chikitsa (Cha. Chi 3/292-309)	CC	MK	KH	L&PPT	T-CS,P-VIVA	F&S	I	-	LH
CO3, CO6	Outline Dhatugata Jwara Chikitsa (Cha.Chi.3/310-316)	CK	MK	K	L&PPT	P-VIVA,T-CS	F&S	I	-	LH

CO3, CO6	Describe Agantuja Jwara Chikitsa (Cha. Chi. 3/317-322)	CK	MK	K	L&PPT	T-CS,P-VIVA	F&S	I	-	LH
CO3, CO6	Explain Punaravartaka Jwara Chikitsa Sutra(Cha.Chi. 3/333-343)	CK	MK	K	DIS,L&PPT	P-VIVA,T-CS	F&S	I	-	LH
CO2	Enlist Jwara-Pramoksha Lakshana (Cha.Chi. 3/324-332)	CK	MK	K	SDL,L&PPT	T-CS,P-VIVA	F&S	I	-	LH
CO1	Summarize the chapter based on Sutra (Cha.Chi.3/333-337)	CK	NK	K	SDL	T-OBT	F&S	I	-	LH
Topic 4 Cha. Chi.4.Raktapitta Chikitsitam (LH :1 NLHT: 0 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO2	Explain Hetu (causative factors), Vyakhya (definition) and Samanya Samprapi of Raktapitta (Cha.Chi.4/5-10)	CC	MK	K	L&PPT	T-CS,P-VIVA	F&S	I	-	LH
CO1, CO2	Explain types of Raktapitta according to predominance of Dosha (Cha. Chi. 4/11-13)	CC	MK	K	L&GD	T-CS,P-VIVA	F&S	I	-	LH
CO1, CO2	Explain Sadhyasadhyata of Raktapitta (Cha.Chi. 4/13-24)	CC	MK	KH	L&GD	T-CS,P-VIVA	F&S	I	-	LH
CO3	Justify Stambhana Nishedha in Raktapitta Chikitsa (Cha.Chi. 4/25-28)	CAN	MK	KH	BS,L	P-VIVA,T-CS	F&S	I	-	LH
CO1, CO3	Elaborate the Chikitsa Sootra of Raktapitta (Cha. Chi. 4/29-30)	CC	MK	KH	L&PPT	P-VIVA,T-CS	F&S	I	-	LH
CO1, CO3	Explain Shodhana Chikitsa in Raktapitta (Cha.Chi. 4/54-61)	CC	MK	KH	L&GD	P-VIVA,T-CS	F&S	I	-	LH
CO3, CO6	Enlist various Shamana Kalpa in Raktapitta Chikitsa - Vasa Ghrita, Shatavaryadi Ghrita, etc.	CK	DK	K	TPW,L&GD	P-VIVA,COM	F&S	I	-	LH

CO3, CO6	Explain Mootramargagata, Purishamargagata and Nasagata Raktapitta Chikitsa (Cha.Chi 86 -101)	CC	DK	KH	CBL,L &PPT	T-CS,P-VIVA	F&S	I	-	LH
CO1	Summarize the chapter based on sutra (Cha. Chi. 4/178-180)	CK	NK	K	SDL	T-OBT	F&S	I	-	LH
Topic 5 Cha. Chi .5. Gulma Chikitsitam (LH :1 NLHT: 0 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO1, CO2	Explain Hetu (causative factors) and Samanya Samprapi of Gulma (Cha.Chi.5/4-7)	CC	MK	KH	L&PPT ,L&GD, BS	T-CS,P-VIVA	F&S	I	-	LH
CO1, CO2	Describe the importance of Gulmasthana in samprapti (Cha.Chi. 5/8)	CC	MK	KH	DIS,BS, L&PPT	P-VIVA,T-CS,CL-PR	F&S	I	-	LH
CO1, CO2	Enlist Hetu and Lakshana of Raktaja Gulma (Cha.Chi. 5/18-19)	CK	DK	K	L&PPT	P-VIVA,T-CS	F&S	I	-	LH
CO2	Discuss Vataja - Pittaja - Kaphaja Gulma Chikitsa	CC	MK	KH	L&GD	P-VIVA,T-CS	F&S	I	-	LH
CO3, CO6	Discuss Gulma - Chikitsa Yoga such as Tryushanadi Ghrita, Hingu-Saurvachaladya Ghrita, Pippalyadya Ghrita, Ksheerashatpala Ghrita, Mishraka Sneha.	CC	DK	KH	L&PPT ,CBL	P-VIVA,T-CS,CBA	F&S	I	-	LH
CO3	Discuss Raktaja Gulma Chikitsa (Cha. Chi.5/183-189)	CC	DK	KH	L&GD	P-VIVA,T-CS	F&S	I	-	LH
CO1	Summarize the chapter based on sutra (Cha.Chi. 4/178-180)	CK	NK	K	SDL	T-OBT	F&S	I	-	LH
CO3, CO6	Discuss Gulma - Chikitsa Yoga such as Tryushanadi Ghrita, Hingu-Saurvachaladya Ghrita, Pippalyadya Ghrita, Ksheerashatpala Ghrita, Mishraka Sneha	CC	DK	KH	L&PPT ,TBL	P-VIVA,T-CS	F&S	I	-	LH

Topic 6 Cha.Chi. 6. Prameha Chikitsitam (LH :1 NLHT: 0 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO1, CO2	Explain causative factors and Samanya Samprapi,Sadhyasadhyata of Prameha in Prameha (Charaka Chikitsa 6/4-7)	CC	MK	KH	L&PPT	T-CS,P-VIVA	F&S	I	-	LH
CO1, CO2	Enlist Dosha - Dushya Sangraha in Prameha (Cha.Chi 6/8)	CK	MK	K	L&PPT ,DIS,BS	P-VIVA,O-QZ,T-CS	F&S	I	-	LH
CO2	Enlist sub-types of Kaphaja, Pittaja and Vataja Prameha - Sankhya Samprapti of Prameha (Charaka Chikitsa 6/9-12)	CK	DK	K	L&PPT	P-VIVA,T-CS	F&S	I	-	LH
CO2	Describe Purvarupa of Prameha (Cha. Chi.6/13-14)	CC	MK	KH	L&PPT	P-VIVA,T-CS	F&S	I	-	LH
CO1, CO3	Elaborate the Chikitsa Sootra of Prameha (Cha. Chi. 6/15-17)	CAP	MK	KH	L&GD, CBL	P-VIVA,T-CS	F&S	I	-	LH
CO2, CO3	Discuss two types of Pramehi with respect to Shodhana and Shamana Chikitsa	CAP	MK	KH	L&GD	T-CS,P-VIVA	F&S	I	-	LH
CO3, CO6	Enlist Shamana Kalpa in Prameha Chikitsa	CK	DK	K	CBL,L &PPT	P-VIVA,T-CS	F&S	I	-	LH
CO1, CO6	Justify the role Aahara Kalpana / Yava in Chikitsa of Prameha (Cha.Chi. 6/18-24)	PSY-SET	NK	KH	L&PPT ,CBL	T-CS,P-VIVA	F&S	I	-	LH
CO2, CO3	Elaborate Prameha - Samanya Chikitsa Siddhanta (Cha. Chi. 6/51-58)	CC	MK	KH	L&GD	P-VIVA,T-CS	F&S	I	-	LH
CO2	Differentiate between Pittaja Prameha and Raktapitta (Cha.Chi. 6/54)	CAN	MK	KH	L&PPT	T-CS,P-VIVA	F&S	I	-	LH
CO2	Differentiate between Kaphaja and Vataja Prameha (Cha. Chi 6/55)	CAN	MK	KH	SDL,DIS	P-VIVA,CBA	F&S	I	-	LH

CO1, CO7	Discuss Prameha as Kulaja Vikara (Cha.Chi. 6/54)	CAP	DK	KH	BS,L&PPT ,DIS	QZ ,P-VIVA,T-CS	F&S	I	-	LH
CO1	Summarize the chapter based on sutra (Cha. Chi. 6/59-61)	CK	NK	K	SDL	T-OBT	F&S	I	-	LH
Topic 7 Cha. Chi.7.Kushtha Chikitsitam (LH :1 NLHT: 0 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO1	Explain causative factors and Samanya Samprapti of Kushtha (Cha.Chi 7/4-10)	CC	MK	KH	L&GD	T-CS,P-VIVA	F&S	I	-	LH
CO1	Enlist and explain Kushthanam Saptako Dravya-Sangraha (Cha. Chi. 7/9-10)	CC	MK	KH	L&GD	T-CS,P-VIVA	F&S	I	-	LH
CO2	Enlist Purvarupa of Kushtha (Cha. Chi. 7/11-12)	CC	MK	K	L&PPT	P-VIVA,T-CS	F&S	I	-	LH
CO2	Enlist seven types of Mahakushtha (Cha. Chi.7/13-20)	CK	MK	K	L&PPT	P-VIVA,T-CS	F&S	I	-	LH
CO2	Enlist eleven types of Kshudrakushtha (Cha.Chi. 7/21-26)	CK	MK	K	L&PPT	T-CS,P-VIVA	F&S	I	-	LH
CO2	Diffentiate between Mahakushtha and Kshudrakushtha	CAN	DK	KH	BS,L&GD	P-VIVA,T-CS	F&S	I	-	LH
CO2	Analyse Doshic predominace of seven types of Mahakushtha (Cha.Chi.7/27-29)	CAN	MK	KH	L&GD	P-VIVA,T-CS	F&S	I	-	LH
CO2	Analyse Samanya Dosha Lakshana in Kushtha (Cha. Chi.7/34-36)	CAN	MK	KH	L&GD	P-VIVA,M-CHT,T-CS	F&S	I	-	LH
CO2	Explain Sadhyasadhyata of Kushtha (Cha.Chi.7/37-38)	CC	MK	K	L&GD	P-VIVA,T-CS	F&S	I	-	LH

CO2, CO3	Elaborate the Chikitsa Sootra of Kushtha (Cha.Chi. 7/39-42)	CAP	MK	KH	L&GD	P-VIVA,T-CS	F&S	I	-	LH
CO2, CO3	Explain Shodhana Chikitsa in Kushtha (Cha. Chi. 7/43-49)	CC	MK	KH	L&GD	P-VIVA,T-CS	F&S	I	-	LH
CO6	Enlist Shamana Kalpa (Bahi-Parimarjana Chikitsa) in Kushtha Chikitsa (Cha. Chi. 7/84-96) - Lepa, Udgharshana.	CK	DK	K	L&GD, TPW	T-CS,P-VIVA,COM	F&S	I	-	LH
CO6	Describe Kushtha - Chikitsa Yoga - Madhvasava, Kanakabindvarishta, Siddharthaka Yoga, variousLepa, Tiktashatpala Ghrita, Mahatiktaka Ghrita, Mahakhadira Ghrita.	CC	DK	K	L&PPT	P-VIVA,T-CS	F&S	I	-	LH
CO2	Enlist Hetu and types of Kilasa (Cha. Chi. 7/173-177)	CK	MK	K	L&GD	T-CS,P-VIVA	F&S	I	-	LH
CO2, CO3	Descibe the Samanya Chikitsa of Kilasa (Cha.Chi. 7/162-172)	CK	MK	KH	L&GD	P-VIVA,T-CS	F&S	I	-	LH
CO1	Summarize the chapter based on sutra (Cha. Chi.7/178-180)	CC	NK	K	SDL	T-OBT	F&S	I	-	LH
Topic 8 Cha.Chi 8.Rajayakshma Chikitsitam (LH :1 NLHT: 0 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO1	Explain Hetu (causative factors) and Samanya Samprapti of Rajyakshma (Cha. Chi 8/4-7)	CC	MK	KH	L&PPT	T-CS,P-VIVA	F&S	I	-	LH
CO1, CO2	Enlist four aetiological factors (chaturvidha-ayatana) in samprapti of Rajayakshma (Cha. Chi.8/13)	CK	MK	K	L&PPT	T-CS,P-VIVA	F&S	I	-	LH
CO1, CO2	Explain Samprapti and Lakshana of Sahasika Yakshma (Cha.Chi. 8/14-19)	CC	DK	KH	CBL,L&GD,BS	P-VIVA,T-CS	F&S	I	-	LH
CO2	Explain Samprapti and Lakshana of Vega-Dharanajanya Yakshma	CC	DK	KH	BS,CBL	P-VIVA,T-	F&S	I	-	LH

	(Cha. Chi. 8/20-23)				,L&GD	CS				
CO2	Explain Samprapti and Lakshana of Kshayajanya Yakshma (Cha. Chi. 8/24-27)	CC	DK	KH	BS,L&GD,CBL	P-VIVA,T-CS	F&S	I	-	LH
CO2	Explain Samprapti and Lakshana of Vishamashanajanya Yakshma (Cha. Chi. 8/28-32)	CC	DK	KH	L&GD, BS,CBL	T-CS,P-VIVA	F&S	I	-	LH
CO1, CO2	Enlist Purvarupa of Rajayakshma (Cha. Chi. 8/33-37)	CK	MK	K	L&GD	P-VIVA,T-CS	F&S	I	-	LH
CO1	Discuss Samanya Samprapti of Rajayakshma (Cha.Chi. 8/38-42)	CC	MK	KH	L&GD	P-VIVA,T-CS	F&S	I	-	LH
CO1, CO2	Enlist Trirupa, Shadrupa, Ekadasharupa Rajayakshma (Cha. Chi 8/45-47, 52)	CK	MK	K	L&PPT	P-VIVA,T-CS	F&S	I	-	LH
CO3	Discuss Lakshanika Chikitsa in Rajayakshma	CC	DK	KH	TPW,L&GD	T-CS,P-VIVA	F&S	I	-	LH
CO6	Discuss Shodhana Chikitsa in Rajayakshma (Cha. Chi. 8/87-88)	CC	MK	KH	L&GD	P-VIVA,T-CS	F&S	I	-	LH
CO2, CO3, CO6	Appraise the role of Jugupsa Chikitsa in Rajayakshma (Cha.Chi.8/149-172)	PSY-SET	MK	KH	L&GD, BS	T-CS,P-VIVA	F&S	I	-	LH
CO2, CO3	Appraise the role of Bahi- Parimarjana Chikitsa in Rajayakshma (Cha.Chi.8/173-178)	PSY-SET	MK	KH	L&GD, BS	T-CS,P-VIVA	F&S	I	-	LH
CO2, CO3	Appraise the role of Manonukula Chikitsa in Rajayakshma (Cha.Chi.8/179- 189)	PSY-SET	MK	KH	BS,L&GD	T-CS,P-VIVA	F&S	I	-	LH
CO1	Summarize the chapter based on Sutra - (Cha.Chi.8/190-191)	CC	NK	K	SDL	T-OBT	F&S	I	-	LH

Topic 9 Cha. Chi.9.Unmada Chikitsitam (LH :1 NLHT: 0 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO1	Define Unmad, Explain Hetu (causative factors), types and Samanya Samprapti of Unmada (Cha. Chi. 9/3-5)	CC	MK	KH	L&PPT	P-VIVA,T-CS	F&S	I	-	LH
CO1, CO2	Enlist Hetu (causative factors) and Vishesha Lakshana of Vataja-Pittaja-Kaphaja-Sannipataja Unmada (Cha. Chi. 9/8-15)	CK	MK	K	L&PPT	P-VIVA,T-CS	F&S	I	-	LH
CO1, CO2	Enlist Hetu (causative factors) and Samprapti, Sadhyasadhyata and Samanya Chikitsa of Agantuja Unmada (Cha.Chi. 9/16-23)	CK	DK	K	L&PPT	T-CS,P-VIVA	F&S	I	-	LH
CO2	Discuss Samanya Chikitsa of Nija Unmada (Cha. Chi. 9/24-32)	CC	MK	KH	L&GD	P-VIVA,T-CS	F&S	I	-	LH
CO6	Enlist Unmada - Chikitsa Yoga such as Kalyanaka Ghrita, Mahakalyanaka Ghrita, Mahapaishachika Ghrita, Lashunadya Ghrita, etc.	CK	DK	K	L&GD	T-CS,P-VIVA	F&S	I	-	LH
CO2, CO3	Explain Paraspara-Dvandva Chikitsa in Unmada (Cha. Chi.9/85-86)	CC	MK	KH	BS,L&GD	P-VIVA,T-CS	F&S	I	-	LH
CO2, CO3	Discuss Samanya Chikitsa of Agantuja Unmada (Cha.Chi. 9/87-95)	CC	MK	KH	L&GD	P-VIVA,T-CS	F&S	I	-	LH
CO2	Describe Vigata Unmada Lakshana (Cha.Chi.9/87-95)	CK	MK	K	L&PPT	P-VIVA,T-CS	F&S	I	-	LH
CO1	Summarize the chapter based on sutra (Cha. Chi. 9/98)	CK	NK	K	SDL	T-OBT	F&S	I	-	LH
Topic 10 Cha.Chi.10.Apasmara Chikitsitam (LH :1 NLHT: 0 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO1	Dedine Apasmara (Cha. Chi.10/3)	CK	MK	K	L&PPT	P-VIVA,T-	F&S	I	-	LH

						CS				
CO1	Explain Hetu (causative factors) and Samanya Samprapti of Apasmar (Cha. Chi.10/4-8)	CC	MK	KH	L&GD	P-VIVA,T-CS	F&S	I	-	LH
CO2	Enlist Samanya Lakshana of Chaturvidha Apasmar (Cha. Chi. 10/8-13)	CK	MK	K	L&PPT	T-CS,P-VIVA	F&S	I	-	LH
CO2	Discuss Samanya Chikitsa of Apasmara (Cha.Chi.10/14-15)	CC	MK	KH	L&GD	P-VIVA,T-CS	F&S	I	-	LH
CO6	Enlist Apasmar - Chikitsa Yoga such as Panchagavya Ghrita, Mahapanchagavya Ghrita, etc.	CK	DK	K	L&PPT ,TPW	P-VIVA,CL-PR,T-CS	F&S	I	-	LH
CO1, CO2	Explain Agantuja Apasmara Chikitsa (Cha. Chi. 10/53)	CC	MK	KH	L&GD	T-CS,P-VIVA	F&S	I	-	LH
CO2	Discuss Hetu, Lakshana and Chikitsa of Atattvabhinivesha (Cha. Chi. 10/54-63)	CK	MK	K	L&GD	T-CS,P-VIVA	F&S	I	-	LH
CO1	Summarize the chapter based on sutra (Cha.Chi.10/66-68)	CK	NK	K	SDL	T-OBT	F&S	I	-	LH
Topic 11 Cha. Chi.11.Kshataksheena Chikitsitam (LH :1 NLHT: 0 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO2	Analyze and interpret Kshataksheena's hetu, samprapti, purvarupa, lakshana.(Cha.Chi.11/4-14)	CC	MK	K	L,L&PPT	Log book,S-LAQ,T-CS,P-ID,VV-Viva	F&S	I	-	LH
CO1	Explain Chikitsa sutra of Kshataksheena	CC	MK	KH	L&PPT ,L,DIS, L&GD	INT,VV-Viva,T-CS,Log book	F&S	I	-	LH

CO1	Discuss the significance lakshadi yoga is to Kshataksheena management.(Cha Chi 11/15-17)	CC	DK	KH	L&GD, L_VC,L &PPT ,DIS,L	T-CS,T-OB T,VV-Viva, S-LAQ,Log book	F&S	I	-	LH
CO6	Discuss in detail about the ingredients and various indications mentioned for Eladi Gutika, Amruta prasha Ghruta, Sarpi Guda, Nagabala Rasayana.	CC	DK	K	L&PPT ,L&GD, SDL,PS M,DIS	CL-PR,Log book,VV-V iva,INT,CO M	F&S	I	-	LH
CO1	Summarise the chapter (Cha.Chi.11/195-196)	CC	NK	K	DIS,TB L,LS,R EC,ED U	VV-Viva,Log b ook,T-OBT,T-CS	F&S	I	-	LH
Topic 12 Cha. Chi. 12.Shwayathu Chikitsitam (LH :1 NLHT: 0 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO2	Analyse and interpret nidan, Samprapti,Purvarupa,Lakshana (Cha.Chi.12/4-100	CC	MK	K	L&PPT ,L&GD, DIS,L	T-CS,VV-Viva,PRN, Log book	F&S	I	-	LH
CO1	Explain chikitsa sutra of Shotha (Cha.Chi.12/16-19)	CK	MK	K	L&GD, L,DIS,L &PPT	VV-Viva,C L-PR,T-CS	F&S	I	-	LH
CO1	Explain the Gudardraka prayoga and its importance,indications. (Cha.Chi.12/ 47-48)	CK	DK	K	L&GD, L,L&PP T ,DIS	T-CS,VV-Viva,Log book	F&S	I	-	LH
CO1	Explain the importance and indications of Kamsaharitaki prayoga. (Cha.Chi.12/ 50-52)	CK	DK	K	LS,TUT ,BS,PB L,CBL	VV-Viva,Log book,T-CS	F&S	I	-	LH

CO6	Discuss the different shamana yogas Gandiradyarishta, Ashtashatrishta, Punarvadyarishta, Kshara Gutika	CK	DK	KH	L&GD, L&PPT ,L_VC, DIS,L	QZ ,CL-PR ,T-CS,Log book,DEB	F&S	I	-	LH
CO3	Discuss in detail about the ingredients and various indications mentioned for Gudardraka prayaoga (Cha.Chi.12/47-48)	CC	DK	K	DIS,TUT,L,L&GD,L&PPT	Log book,T-CS,VV-Viva	F&S	I	-	LH
CO1	Summarise the chapter (Cha.Chi.12/103)	CK	NK	K	L&GD, L,BS	CL-PR,T-CS,Log book	F&S	I	-	LH
Topic 13 Cha. Chi.13.Udara Chikitsitam (LH :1 NLHT: 0 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO1	Analyse and interpret hetu, Samprapti,purvarupa, rupa, sadhyasadhyata of udara roga . (Cha.Chi.13/ 9-58)	CC	MK	KH	DIS,L&GD,REC,L&PPT	P-VIVA	F&S	I	-	LH
CO1	Explain the samanya and avasthika chikitsa chikitsa of Udara (Cha.Chi.13/59-94, 177,184-188)	CC	MK	KH	L&PPT ,CBL,L&GD	P-VIVA,T-CS,T-OBT	F&S	I	-	LH
CO1, CO2	Analyse and interpret hetu,purvarupa, rupa, samprapti sadhyasadhyata of udara(cha. Chi.13/12-58)	CC	MK	KH	L&PPT ,TBL,BS,DIS,L	T-CS,Log book,CL-PR	F&S	I	-	LH
CO1	Explain the samanya and avasthika chikitsa chikitsa of Udara (Cha.Chi.13/59-94, 177,184-188)	CK	MK	K	L,L&GD,L&PPT ,DIS	VV-Viva,Log book,T-CS	F&S	I	-	LH

CO6	Explain the importance of Takra prayoga in udara 101-106	CK	DK	KH	L&GD, BS,L&P PT ,L,DIS	T-CS,Log book	F&S	I	-	LH
CO6	Explain the importacne and indications for Chikraka Ghruta, Narayana churna (Cha.Chi.13/116-117, 124-132)	CC	DK	KH	L,DIS,L &PPT , CBL,L &GD	T-CS,VV-Viva,Log book	F&S	I	-	LH
CO1	Summarise the chapter (Cha.Chi.13/195-196)	CK	NK	K	TBL,RE C,L&G D,L,DIS	Log book,T -CS,VV-Viva	F&S	I	-	LH
Topic 14 Cha. Chi.14.Arsha Chikitsitam (LH :1 NLHT: 0 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO2	Exaplain Bhedha,Nidana Samprapti, and their Lakshana, Sadhyasadhyata(Cha.Chi.14/ 5-31)	CC	MK	KH	L&GD, L,IBL,B S,SY	T-CS,CL-P R,VV-Viva,Log book	F&S	I	-	LH
CO1	Explain the chikitsa sutra of Shushkarsha (Cha.Chi.14/ 33-34, 38-39, 119-120)	CC	MK	KH	L&GD, L,DIS,P BL,TBL	Log book,T -OBT,T-CS ,VV-Viva,C L-PR	F&S	I	-	LH
CO1	Explain chikitsa of Ardra Arsha (Cha.Chi.14/ 170-184, 243-248)	CK	MK	KH	L&PPT ,L,L&G D,DIS,T BL	VV-Viva,Log book,T-CS	F&S	I	-	LH
CO1	Explain importance of Agni in the management of Arsha	CC	MK	KH	IBL,DIS	CL-PR,T-	F&S	I	-	LH

	(Cha.Chi.14/244-248)				,BS,TBL,CBL	CS,Log book,T-OBT,VV-Viva				
CO1	Describe the importance of Takrarishta and Takra in Arsha chikitsa (Cha.Chi.14/ 72-88)	CC	DK	KH	TBL,DIS,L,L&GD,L&PPT	Log book,T-OBT,VV-Viva,T-CS	F&S	I	-	LH
CO3	Describe ingredients and indications mentioned for Abhayarishta , Dantyarishta (Cha.Chi.14 138-143, 144-147)	CC	DK	KH	L&GD,L&PPT,TBL,L,DIS	Log book,VV-Viva,T-CS	F&S	I	-	LH
CO1	Summarise the chapter (Cha.Chi.14/249-255)	CC	NK	KH	L,L&GD,L&PPT	Log book,T-OBT,VV-Viva,T-CS	F&S	I	-	LH
Topic 15 Cha. Chi.15.Grahani dosha Chikitsitam (LH :2 NLHT: 0 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO2	Analyse and interpret Grahani roga Bhedha, their hetu,Lakshana, Purvarupa, and Sadhyasadhyata of Grahani roga (Cha.15/ 52-72)	CK	MK	KH	L&GD,CBL,TBL,DIS,BS	INT,VV-Viva,T-CS,CL-PR	F&S	I	-	LH
CO1	Explain the chikitsa sutra for vataja grahani (Cha.Chi.15/74-81)	CC	MK	KH	TBL,LS,DIS,L&GD,W	VV-Viva,T-CS,Log book,T-OBT	F&S	I	-	LH
CO1	Explain the chikitsa sutra for Pitta and Kaphaja grahani (Cha.Chi.15/122-145) 141-145	CC	MK	KH	L&PPT,TBL,SDL,DIS,	VV-Viva,CL-PR,Log book,T-	F&S	I	-	LH

					L&GD	OBT,T-CS				
CO1	Explain avasthiki chikitsa and importance of sneha prayoga in tridoshaja Granahi chikitsa (Cha.Chi.15/194-195, 198)	CC	MK	KH	L&GD, L,L&PPT	Log book,VV-Viva,T-CS	F&S	I	-	LH
CO1	Explain importance agni and Atyagni (Cha.Chi.15/ 211-234)	CC	MK	KH	L,L&PPT ,L&GD	T-OBT,Log book,T-CS, VV-Viva	F&S	I	-	LH
CO3	Describe ingredients and indications of Dashamuladya Gruta Chitrakadi Gutika, Takrarishta (Cha.Chi/15/82-86,96-97, 117-121,)	CC	DK	KH	L,L&PPT ,L&GD	WP,M-MOD,QZ , VV-Viva,CL-PR	F&S	I	-	LH
CO1	Summarise the chapter (Cha.Chi.15/244-249)	CC	NK	KH	L&GD, L,L&PPT	T-CS,Log book,VV-Viva	F&S	I	-	LH
CO2, CO3	Describe Ajeerna Hetu, Samanya lakshna and Chikitsa Cha.Chi.15/42-49,73-76)	CC	DK	K	L&PPT ,L	P-VIVA,T-CS	F&S	I	-	LH
CO3	Describe Importance of Agni (Cha.Chi.15/3-41)	CK	DK	K	L&GD, L,L&PPT	T-CS,P-VIVA	F&S	I	-	LH
Topic 16 Cha. Chi.16.Panduroga Chikitsitam (LH :1 NLHT: 0 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO2	Explain Pandu roga bhedha, Nidan, Samprapti,Purvarupa, Lakshana, and Sadhyasaadhyata ofPanduroga (Cha.Chi16/ 3-38)	CC	MK	KH	L&PPT ,L,L&GD	PRN,T-CS,Log book,CL-PR,VV-Viva	F&S	I	-	LH

CO1	Explain samanya chiktsa of Pandu and kamala (Cha.Chi 16/ 39-43)	CC	MK	KH	L,L&GD,L&PPT	T-CS,Log book,VV-Viva	F&S	I	-	LH
CO1	Discuss Samshodhana chikitsa in Pandurog (Cha.Chi 16/ 55-69)	CC	DK	KH	L&GD, L&PPT,L	INT,T-CS, VV-Viva,Log book,PRN	F&S	I	-	LH
CO1	Explain chikitsa for Mrudbhakshanajanya pandu (Cha.Chi.16/ 116,117,121-123)	CC	DK	KH	L,L&GD,L&PPT	VV-Viva,Log book	F&S	I	-	LH
CO3	Describe Shaman yogas of Pandu -the ingredients and indications of Navayasa Loha churna, Mandura vataka, Punarnava mandura , yogaraja, Damadimadya Ghruta (Cha.Chi16/44-46, 70-71, 72-77, 80-86, 93-96)	CC	DK	KH	L&GD, L,L&PPT	T-CS,Log book,VV-Viva	F&S	I	-	LH
CO1	Summarise the chapter (Cha.Chi.16/138--139)	CC	NK	KH	L&GD, L,L&PPT	Log book,VV-Viva	F&S	I	-	LH
CO2	Explain Lakshanas of Vataj, Pittaj, Kaphaj, Tridoshaj, and Mrudabhakshanajany Panu roga lakshana Cha Chi.16/17-30)	CK	NK	KH	L&PPT,TBL	T-CS	F&S	I	-	LH
CO2	Explain chikitsa sutra for Kamala, Haleemak (Cha.Chi.16/124-136)	CK	DK	K	L,L&GD	T-CS	F&S	I	-	LH
Topic 17 Term 1 Non Lecture theory Activities (LH :0 NLHT: 34 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO1	Apply Fundamental Principle of Samhita in diagnosis, interpretation, treatment planning, selection of formulations and appropriate dosage form, Kaala, Anupan etc.	CAP	MK	KH	FC,TBL,L&GD	Log book,INT,RK,VV-Viva	F	I	-	NLHT17.1

CO1, CO2	Appraise Sambhasha on different topics of Samhita.	AFT-VAL	MK	SH	D	P-VIVA	F&S	I	-	NLHT17.2
CO1	Conduct Cross sectional study of Samhita	CAP	MK	KH	TBL,L &GD	RK,INT	F	I	-	NLHT17.3
CO1	Compare and analyse Charaka Samhita and Sushruta Samhita	CC	DK	KH	L&PPT ,L&GD	Log book,COM	F	I	-	NLHT17.4
CO2, CO3, CO6	Perform Samhita based analysis of Diseases.	CAP	MK	KH	D-BED	CBA,RK,P-VIVA	F&S	I	-	NLHT17.5
CO7	Review and summarize Published Articles on different aspects, topics of Samhita.	CAP	MK	KH	L&GD, TBL	INT,RK	F	I	-	NLHT17.6
CO1, CO2	Illustrate the Concept mapping of Samprapti and Chikitsa	CAP	MK	K	D	P-VIVA	F&S	I	-	NLHT17.7
CO1	Analyse Chikitsa Siddhanta of Charaka Samhita and Sushruta Samhita	CC	MK	K	D	P-VIVA	F&S	I	-	NLHT17.8
CO7	Integrate Chikitsa concepts of Samhita with contemporary medical science	CAP	MK	KH	L&GD, TBL	INT,RK	F	I	-	NLHT17.9
CO1	Evaluate and describe Samhita with the help of Tantrayukti	CC	MK	KH	SDL	INT,RK,VV-Viva,Log book	F	I	-	NLHT17.10
CO1, CO2	Perform interview of senior Vaidya.	CAP	MK	KH	L&GD, TBL	INT,RK	F	I	-	NLHT17.11
CO1	Interpret and decode Samhitas with commentary.	CC	NK	KH	L&GD, TBL,DIS	PP-Practical,VV-Viva, T-CS,T-	F&S	I	-	NLHT17.12

						OBT				
CO1	Recite memorise and recall important Shloka	CC	MK	K	SDL	P-REC	F&S	I	-	NLHT17.13
CO1	Justify the position of the chapter in the Samhita and its importance	CC	MK	K	L&GD	P-VIVA	F&S	I	-	NLHT17.14

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 17.1	Fundamental Principle of Samhita used in diagnosis, interpretation, treatment planning, selection of formulations and appropriate dosage form, Kaala, Anupan etc.	**Aim:** To apply the fundamental principles of **Samhita** in **diagnosis, interpretation, treatment planning, formulation selection, dosage form, Kaala, and Anupana**, ensuring their practical relevance in clinical decision-making. **Steps:** 1. **Identify Key Siddhantas** (e.g., **Samanya-Vishesha, Karya-Karana, Guna Siddhanta**) and their role in diagnosis and treatment. 2. **Analyze the Application of Shad Upakramas** in disease management across **Chikitsa Sthana**. 3. **Evaluate Kalpa-Kalpana**, including **Sneha Kalpana, Panchavidha Kashaya Kalpana**, and their selection based on disease condition. 4. **Determine Aushadha Sevana Kala** for appropriate drug administration as described in **Chikitsa Sthana**. 5. **Examine Treatment Modalities** (**Daivavyapashraya, Yuktivyapashraya, Satvavajaya Chikitsa**) and their applicability. 6. **Correlate Siddhantas with Clinical Cases**, selecting the appropriate formulation, dosage, Kaala, and Anupana. 7. **Present Case Analysis** demonstrating the integration of these principles in real-world scenarios.

NLHT 17.2	Conducting Sambhasha on different topics of the Samhita	**Aim:** To conduct **Sambhasha** (scholarly discussion) on **complex topics from Charaka Samhita**, enabling critical analysis, textual understanding, and clinical application. **Steps for Conducting Sambhasha:** **Pre-Preparation:** 1. **Select the Topic** – Choose a relevant topic (e.g., **Tamake Tu Virechanam, Vamana in Hridroga, Avarana Vata**). 2. **Study Primary Texts** – Refer to **Charaka Samhita, Chakrapani Teeka**, and related commentaries. 3. **Review Secondary Literature** – Gather insights from **research papers, case studies, and clinical experiences**. 4. **Define Key Discussion Areas** – Prepare thought-provoking questions to guide the dialogue. 5. **Set Discussion Rules** – Structure the rounds, time limits, and participation format. **Conducting Sambhasha:** 6. **Invite Participants** – Open participation for **students, PG scholars, and faculty**. 7. **Introduce the Topic** – Provide a brief overview, contextual background, and clinical relevance. 8. **Facilitate Knowledge Sharing** – Encourage participants to discuss textual interpretations, evidence, and clinical perspectives. 9. **Explore Practical Applications** – Discuss the real-world implications and applicability of concepts. 10. **Summarize and Document Insights** – Conclude with key takeaways and document references from **texts and research**. **One Sambhasha in each Term** **Suggested topics:**

		First Term (1 hour) Diagnosis and management of Manas Jwara/ understanding Yogavahitva of Vata/ diagnosis and Management of Gulma/ understanding the Samprapti of Prameha/ Understanding Jaata Pramehi and Beeja Dosha etc.
NLHT 17.3	Cross sectional study of Samhita	**Cross-Sectional Study of Chikitsa, Kalpa, and Siddhi Sthana in Charaka Samhita** **Objective:** To analyze and correlate concepts across **Chikitsa, Kalpa, and Siddhi Sthana**, highlighting their interconnections in treatment, formulation, and procedural mastery. **Instructions:** 1. **Group Formation & Theme Allocation:** ◦ Divide students into three groups, each focusing on a core theme: ▪ **Disease Management (Chikitsa Sthana)** ▪ **Pharmacological Preparations (Kalpa Sthana)** ▪ **Panchakarma Procedures & Their Mastery (Siddhi Sthana)** 2. **Cross-Sectional Analysis:** ◦ Identify key topics that interlink across these Sthanas (e.g., **Vamana, Virechana, Basti, Raktamokshana, Jwara Chikitsa**). ◦ Compare how treatment principles in **Chikitsa Sthana** transition into specific formulations in **Kalpa Sthana** and their procedural refinements in **Siddhi Sthana**. 3. Steps for Conducting Literature Reviews 1. Define the topic: Clearly identify the specific topic or concept from Charaka Samhita 2. Study the primary text: Read the Charaka Samhita and its commentaries. 3. Collect information from secondary sources: Read the relevant published research articles, case reports, books, video lectures etc. 4. Organize the collected information: Categorize the sources into headings, such as: - classical interpretations, modern findings etc.

		5. Write the review: Introduction, Classical interpretations, findings of recent researches, clinical applications, discussion, areas require further explorations, conclusion, references. 4. **Comparative Presentation:** ◦ Groups will present findings using **charts, tables, or case studies** to demonstrate continuity and progression across Sthanas. 5. **Discussion & Conclusion:** ◦ Class discussion on the **structured knowledge flow** from disease management to formulations and procedural expertise. ◦ Reflection on how this organization enhances **clinical application**. **Assessment Criteria:** • Depth of cross-sectional analysis • Logical correlation between Sthanas • Clarity in presentation • Use of textual references **Suggested topics for conducting literature reviews** **First Term** The Role of Langhana Chikitsa in Disease Management: An Analysis/ Dharana of Adharaniya Vega: A Potent Cause of Disease/ Viruddha Ahara Janya Vyadhi: The Impact of Incompatible Food Combinations/ The Role of Ahara in Manas Vyadhi: Food and Mental Health etc.
NLHT 17.4	Comparative study of Charaka Samhita and Sushruta Samhita	**Aim:** To conduct a **comparative study** of **Charaka Samhita and Sushruta Samhita** using a **flipped classroom approach**, integrating self-study, group discussions, and concept mapping for deeper understanding.

Activity Steps:

1. Pre-Class Activity (Self-Study)

- Students will explore a **specific topic** from both **Charaka Samhita** and **Sushruta Samhita** before class.
- **Resources:** Selected chapters, commentaries, videos, research articles, and presentations.
- **Task:** Identify and note **similarities and differences** between the two texts.

2. In-Class Activity (Interactive Learning)

- **Group Discussion:** Students are divided into groups, each assigned a specific topic.
- Each group presents a **comparative analysis** of Charaka and Sushruta's perspectives.

3. Concept Mapping

- Students create **visual concept maps** to illustrate the differences and interconnections between the two Samhitas.

4. Post-Class Activity (Assessment & Reflection)

- **Reflective Report:** Students submit a structured report summarizing their comparative analysis.
- **Peer Feedback:** Teachers and students review and provide feedback on each other's findings.

Suggested Chapters:

First Term (4 hours)

Cha.Chi. 1 and Su.Chi.27-30

		Cha.Chi.2 and Su. Chi. 26 Cha.Chi. 3 and Su.Ut.39 Cha.Chi.9,10 and Su.Ut.61.62
NLHT 17.5	Samhita Based Analysis of Diseases	**Aim:** To apply **Ayurvedic diagnostic and treatment principles** through case analysis based on **Charaka Samhita**, enhancing clinical reasoning and practical understanding. **Activity Steps:** **1. Case Allocation** • Each student/group is assigned a **disease** described in **Charaka Samhita** for in-depth analysis. **2. Case Analysis** • Review the **patient case** and identify key aspects using **Nidana Panchaka**. • Analyze the **treatment rationale** based on Charaka Samhita's principles. **3. Documentation** • Record findings, diagnosis, and treatment approach in a **structured format** (activity book, record book, or journal). **4. Outcome Assessment** • Develop practical insights into **Ayurvedic disease management** through direct application of Samhita-based principles.

		Suggested Chapters for Cases: **First Term (4 hours)** Cha. Chi. 3 - Case of Jwara Cha. Chi. 6 - Case of Prameha Cha. Chi. 7 - Case of - Kushta Cha. Chi. 15 - Case of Grahani
NLHT 17.6	Review of Published Articles from Samhita	**Aim:** To develop **research and analytical skills** by reviewing published articles, summarizing key findings, and integrating insights with **Samhita principles**. **Activity Steps:** **1. Topic Selection** • Choose a **relevant and specific** topic related to Samhita studies. **2. Article Collection** • Identify **at least five** research articles from reputed **national or international journals**. • Ensure sources are **credible** and directly related to the selected topic. **3. Analysis & Interpretation** • Summarize **key insights** from each article. • Compare findings with **Ayurvedic classics** (e.g., **Charaka Samhita**). • Identify **trends, gaps, and areas for further exploration**. **4. Synthesis of Information**

		• Integrate findings into a **cohesive summary**. • Discuss **alignments and deviations** between **Ayurvedic principles and modern research**. **5. Documentation** • Record the **structured review** in the prescribed **journal book format**. • Maintain **academic writing standards**, ensuring clarity and coherence. **6. Presentation & Reflection** • Share insights through a **written report or presentation**. • Participate in **peer discussions** for feedback and refinement. **Two articles in each term** Suggested article's topics: **First Term (2 hours)** Rasayana, Prameha, Kushtha, Grahani. etc
NLHT 17.7	Concept mapping of Samprapti and Chikitsa	**Aim:** To develop a structured understanding of **Samprapti (pathogenesis)** and **Chikitsa (treatment)** through **concept mapping** based on **Samhita principles** for a given case or disease. **Steps for Concept Mapping** Students will create a **visual representation** to systematically illustrate **Samprapti and Chikitsa** for a selected disease, ensuring clarity in Ayurvedic pathogenesis and treatment approach. **A. Samprapti (Pathogenesis)**

		1. Define the **central theme** of the disease's Samprapti. 2. Identify the **Nidana (causative factors)**. 3. Establish the connection between **Dosha vitiation and causative factors**. 4. Map the key elements of **Samprapti**, including **Dushya, Agni, Srotas, Adhishthana, and Rogamarga**. 5. Connect **Purvarupa (prodromal symptoms)** with **Rupa (manifested symptoms)**. 6. If applicable, link **Upadrava (complications)**. **B. Chikitsa (Treatment)** 1. Define the **central concept** of treatment. 2. Determine the **type of Chikitsa** (e.g., **Shodhana, Shamana, Nidana Parivarjana**). 3. Specify **treatment modalities**, such as **Vamana, Virechana, Aushadha Yogas, and Pathya-Apathya**. 4. Correlate the **treatment plan with the Samprapti** components. 5. Illustrate **Samprapti Vighatana (pathogenesis reversal)**. 6. Highlight **preventive measures post-treatment**, such as **Rasayana therapy and Swasthavritta practices**. **Two concept mapping of cases/diseases in each term** **Suggested Topic:** **First Term (2 hours)** Case of Kushta, Madhumeha, Udara, Grahani etc.
NLHT 17.8	Comparative Analysis of Chikitsa Siddhanta of Charaka Samhita and Sushruta Samhita	**Aim:** To compare and analyze the Chikitsa Siddhanta (treatment principles) of Charaka Samhita and Sushruta Samhita for a given case, disease, or chapter. **Steps for Comparative Analysis** 1. Focus on Chikitsa Siddhanta (principles of treatment) in both texts.

		2. Study the key sections: such as - Samprapti of the disease, Chikitsa Sutras etc. 3. Identify key areas of Chikitsa: such as - Shodhana, Shamana, Nidana and Surgical methods etc. suggested for the management in both the texts. 4. Identify the key difference and reasons of specific management suggested 5. Compare treatment approaches 6. Write the conclusion. **Two case/disease/chapters in each term:** **Suggested Topics:** **First Term (2 hours)** Kushtha Chiktsa siddhanta of Charaka and Sushruta Samhita, Arsha Chikitsa of Charaka Samhita and Sushruta Samhita
NLHT 17.9	Integrative activities - Compare Chikitsa concepts of Samhita with contemporary medical science	**Aim:** To compare the *Chikitsa* concepts of *Charaka Samhita* with contemporary medical science, identifying similarities, differences, and integrative possibilities for better healthcare understanding. Comparing the Chikitsa concepts of Charaka Samhita with contemporary medical science involves identifying parallels, differences, and areas of integration between ancient Ayurvedic principles and contemporary medical practices. Steps to Compare Chikitsa Concepts of Charaka Samhita with contemporary Medicine for a given case/disease 1. Study the disease and principles of management from Charaka Samhita 2. Identify modern medical correlates 3. Compare the aetiopathogenesis, symptomatology of both 4. Analyse the treatment modalities 5. Make parallel understanding 6. Explore integrative potential 7. Identity the strength and limitations of both 8. Organize the findings 9. Draw conclusion **Each Term two cases/diseases** **Suggested Topics**

		First Term (2 hours) Beej Doshaja Pramehi and Type 1 diabetes/Juvenile Diabetes, Grahani and Irritable Bowel Syndrome (IBS), Jalodara and Ascites, Yakritodara and hepatomegaly, etc.
NLHT 17.10	Evaluation by Tantrayukti	Aim: Identification of Tantrayukti from a given Chapter/Sutra of Charaka Samhita **1.Chapter Allocation:** • A Sutras will be selected from specific chapter from Charaka Samhita will be assigned to students for analysis. **2.Identification of Tantrayukti:** • Students will carefully examine the text to identify various Tantrayuktis used in structuring the content. • They will analyze the Tantrayuktis and explain their significance in interpreting the chapter. **3.Comparison & Analysis:** • Compare the identified Tantrayuktis with their definitions and applications in Ayurveda literature. • Understand how they aid in conveying deeper meanings and logical structuring in classical texts. **4. Documentation:** • Findings will be systematically recorded in the activity book, record book, or journal,

		following a structured format. **Suggested Chapters and Sutras** **First Term (2 hours)** Ch.Chi.3/11-14 Ch.Chi.6/15-17, 49 Ch.Chi.7/9-10 Ch.Chi.13/176-177
NLHT 17.11	Interview of senior Ayurveda Vaidya	**Aim:** To gain insights from a renowned Ayurveda practitioner and document their experiences and perspectives. An Insightful Interview with renowned and Successful Ayurveda practitioner. **The Interview** Practitioner's Journey: How did they become involved in Ayurveda? Philosophy and Principles: Their perspective on Ayurveda and its core principles. Current Practices: Insights into their daily practice, treatments they offer, and their approach to patient care. Challenges: Discuss any challenges they face in their practice and how they overcome them. Future of Ayurveda: Their thoughts on the future of Ayurveda in modern healthcare. All these has to be Documented in Journals. **One interview in each term online / offline**
NLHT 17.12	Exploring Vyakhya	Aim: To deepen students' understanding of *Chakrapani Vyakhyan* through discussions, written interpretations, and structured documentation of *Charaka Samhita* verses. Students will deepen their understanding of Chakrapani Vyakhyan (commentary on Charaka Samhita) through classroom discussions and written interpretations. In each session, specific commentary verses will be analyzed, focusing on both the original text of Charaka Samhita and Chakrapani's interpretations. Students will document these in a structured format, enhancing their skills in interpreting classical Ayurvedic literature.

		Classroom Discussions: Attend designated sessions per term, discussing selected verses from Chakrapani's commentary. Focus on how Chakrapani explains key terms and verses. **Written Documentation** After each session, write interpretations in a structured format, including: Sutra from the original text from Charaka Samhita Chakrapani's interpretation Your reflections **Group Work:** Collaborate in groups to analyse verses and present interpretations in the classes Presentation & Discussion: Present written interpretations in class for feedback from peers and faculty. **Peer Review:** Exchange interpretations for constructive feedback. **Final Submission:** Compile all interpretations into a document, which is to be recorded in an activity book, record book, or Journal. **Suggested Sutras:** **First Term (5 hours)** Chakrapani Teeka about sequencing of the Chapters of Chiktsa-sthana. Ch. Chi. 3/31, 38, 161-162, 216-217 Ch.Chi.4/7-8 Ch.Chi.5/6-7 Ch.Chi.6/56-57 Ch.Chi.7/9-10, 33 Cha.Chi.8/28-32 Ch.Chi.9/5 Ch.Chi.10/3, 4-5 Cha Chi.13/9-11 Cha Chi 15/38-41

NLHT 17.13	Recite, Memorise and recall Shlokas	**Aim:** To practice Shloka recitation, memorization, recalling, and documentation with accuracy. Shloka Recitation Activity and Documenting in Journal. 1. Verse Recitation Students will participate in two dedicated recitation sessions per term. • Each session will focus on chanting selected verses from Charaka Samhita. 2. Documentation of Shlokas in Journal – At home. • Students will neatly document the shortlisted verses in their Shloka Book, which is part of the Record Book, Activity Book, or Journal. • Proper handwriting, accuracy, and presentation will be emphasized. 3. Peer and Faculty Feedback Students will receive feedback from peers and faculty during recitation sessions. Feedback will focus on: Accuracy: Correct recitation of the verses. Pronunciation: Proper articulation of Sanskrit sounds. **Sutras Suggested:** **First Term (6 hours)** Cha. Chi. 1/1/3-12, 15, 16, 62-74,1/2/16-19, 1/3/30-31, 1/3/36-40, 1/3/41-42, 1/3/ 62-63,1/4/30-35, 1/4/51 Cha. Chi. 2/4/36, 39, 43, 46-51 Cha. Chi. 3/28,29, 31,36,140-142, 160, 200-203, 285-286, 315,316, 340, 341 Cha.Chi.4/ 5-8, 9, 25, 55-56, 88, 91-92

		Cha. Chi. 5/ 6-7, 183-188 Cha. Chi. 6/ 4-8, 13-14, 15, 16, 56, 57 Cha. Chi 7/ 9-10, 11-12, 21-26, 39-42, 140-143 Cha Chi 8/13, 39-42, 45-46, 52, 111-113 Cha.Chi.9/ 6-8, 25-27, 96, 97 Cha Chi 10/3-5, 14-15, 25-27,57-60 Cha Chi 11/15, 21-22,91-92 Cha Chi 12/16-19, 50-52 Cha Chi. 13/59-61, 68-69, 72-73, 124-128 Cha. Chi. 14 138-143, 144-147 Cha. Chi. 15/3-4, 36-37, 51-54, 56-57,74, 75, 77-78, 122-124, 141-141, 201-202, 232-233
NLHT 17.14	Jastification of Cronological arrangement of Samhita	**Justification of the Chronological Arrangement of Adhyayas in Chikitsa, Kalpa, and Siddhi Sthana of Charaka Samhita** **Objective:** To analyze and justify the sequential arrangement of **Adhyayas** within **Chikitsa, Kalpa, and Siddhi Sthana**, highlighting their logical progression and clinical relevance. **Instructions:** 1. **Study & Group Allocation:** ◦ Students will be divided into three groups: ▪ **Chikitsa Sthana** – Disease management principles. ▪ **Kalpa Sthana** – Formulations for detoxification. ▪ **Siddhi Sthana** – Mastery of Panchakarma procedures. 2. **Discussion & Analysis:** ◦ Each group will examine: ▪ The purpose and flow of Adhyayas.

- The rationale for their sequence.
- Their clinical applicability.

3. **Comparative Justification:**

    - Groups will collaborate to establish the interconnection between Adhyayas across Sthanas, focusing on the transition from treatment to formulations and procedural expertise.

4. **Presentation & Reflection:**

    - Groups will present their findings with textual references.
    - Discussion on how the structured arrangement aids Ayurvedic practice.

Assessment Criteria:

- Depth of analysis
- Logical justification
- Clarity in presentation
- Use of references

Topic 18 Cha Chi.17.Hikka Shwasa Chikitsitam (LH :1 NLHT: 0 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2	Explain Nidanadi Panchaks, Sadhyasadhyata of Hikka-Shwasa (Cha. Chi.17/10-69)	CC	MK	KH	L&GD, L,L&PPT	Log book,VV-Viva,T-CS,PRN	F&S	II	-	LH
CO1	Explain the Samanya Chikitsa of Hikka-Shwasa (Cha. Chi. 17/71-76)	CC	MK	KH	L&PPT ,L&GD, L	CL-PR,VV-Viva,INT,T-CS,Log book	F&S	II	-	LH

CO1	Analyze Management of Hikka-Shwasa based on Balabala of Rogi (Cha. Ch. 17/88-90)	CAN	MK	KH	L,L&GD,L&PPT	T-OBT,T-CS,Log book,INT,VV-Viva	F&S	II	-	LH
CO1	Explain Samshodhana chikitsa in Shwasa (Cha. Chi. 17/121-122)	CC	MK	KH	L,L&PPT,L&GD	CR-W,PRN,Log book,VV-Viva,T-CS	F&S	II	-	LH
CO1	Explain Doshaanusar Chikitsa for Hikka and Shwasa (Cha. Chi. 17/147-150)	CC	MK	KH	L,L&GD,L&PPT	T-CS,Log book,VV-Viva	F&S	II	-	LH
CO1	Explain different Shamana Yoga such as Shatyadi Churna, Muktadya Churna, Dashamuladya Ghrita, Manasheela, Tejovatyadi Ghrita in Hikka-Shwasa (Cha. Chi. 17/125-128,129-134, 141-144, 145-146)	CC	DK	KH	L,L&GD,L&PPT	VV-Viva,T-OBT,T-CS,Log book	F&S	II	-	LH
CO1	Summarise the chapter 138-139	CC	NK	KH	L&PPT,L&GD,L	VV-Viva,Log book,T-CS	F&S	II	-	LH
Topic 19 Cha. Chi.18.Kasa Chikitsitam (LH :1 NLHT: 0 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO2	Explain Nidana Panchaka and Sadhyasadhyata of Kasa (Cha. Chi. 18/04-31)	CC	MK	KH	L,L&GD,L&PPT	T-OBT,T-CS,Log book,VV-Viva,PRN	F&S	II	-	LH
CO1	Explain the Chikitsa Sutra of Vataja, Pittaja, Kaphaja, Kshataja and Kshayaja Kasa. (Cha. Chi. 18/32-34, 83-86, 108-111,134, 149-157)	CC	MK	KH	L,L&GD,L&PPT	Log book,VV-Viva,T-OBT,T-CS	F&S	II	-	LH

CO1	Explain different Shamana Yoga mentioned in Kasa such as Kanthakari Ghrita, Pippalyadya Ghrita, Rasnadi Ghrita, Chitrakadi Leha, Agastya Haritaki (Cha. Chi. 18/35, 36-38, 43-46, 57,62)	CC	DK	KH	L&PPT ,L&GD, L	T-CS,VV-Viva,Log book	F&S	II	-	LH
CO1	Summarise the Chapter (Cha. Chi. 18/190-191)	CC	NK	KH	L&PPT ,L&GD, L	INT,VV-Viva,Log book	F&S	II	-	LH
Topic 20 Cha. Chi.19.Atisara Chikitsitam (LH :1 NLHT: 0 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO2	Discuss Nidana Panchaka of Atisara and Sadhyasadhyata (Cha. Chi. 19/05-11)	CC	MK	KH	L&GD, L&PPT ,L	VV-Viva,Log book	F&S	II	-	LH
CO1, CO2	Explain Samanya Chikitsa Sutra for Nija and Agantuja Atisara (Cha. Chi. 19/10-13)	CC	MK	KH	L,L&GD,L&PPT	T-CS,Log book,VV-Viva	F&S	II	-	LH
CO1	Explain the Chikitsa Sutra for Aamatisara (Cha. Chi. 19/14-18)	CC	MK	KH	L&PPT ,L,L&GD	Log book,T-CS,VV-Viva	F&S	II	-	LH
CO1	Describe different Shamana Yoga mentioned in Atisara such as Changeri Ghrita, Pramathya (Cha. Chi. 19/20-22, 44)	CC	DK	KH	L&PPT ,L,L&GD	T-CS,Log book,VV-Viva	F&S	II	-	LH
CO1	Explain Shleshmatisara Chikitsa Cha. Chi. 19/102-103,104-120)	CC	DK	KH	L&PPT ,L&GD, L	Log book,T-OBT,T-CS ,VV-Viva	F&S	II	-	LH
CO1	Describe importance of Picchabasti Prayoga in Raktatisara (Cha.	CC	DK	KH	L,L&G	Log book,V	F&S	II	-	LH

	Chi. 19/93-95)				D,L&PPT	V-Viva,T-CS				
CO2	Explain Sannipataja Atisara Chikitsa Sutra (Cha. Chi. 19/122)	CC	MK	KH	L,L&GD,L&PPT	T-CS,VV-Viva,Log book,INT	F&S	II	-	LH
CO1	Summarise the chapter (Cha. Chi. 19/123)	CC	NK	KH	L&PPT,L&GD,L	T-CS,Log book,VV-Viva	F&S	II	-	LH
Topic 21 Cha. Chi.20.Chhardi Chikitsitam (LH :1 NLHT: 0 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO2	Explain Nidana Panchaka and Sadhyasadhyata of Chhardi (Cha.Chi. 20/06-19)	CK	MK	K	DIS,L_VC	Log book,DEB,PRN,CL-PR,VV-Viva	F&S	II	-	LH
CO1	Explain the Samanya Chikitsa of Chhardi (Cha. Chi. 20/20-22)	CC	MK	KH	L&GD,BS,TUT,SDL,SY	VV-Viva,T-CS	F&S	II	-	LH
CO1	Explain the Vishesha Chikitsa Vataja, Pittaja, Kaphaja , Sannipataj, Dvishtarthaj Chhardi (Cha. Chi. 20/23, 26, 34,41)	CC	MK	KH	RP,L&PPT ,L&GD,TBL,CBL	M-CHT,Log book,M-MOD,CL-PR,T-CS	F&S	II	-	LH
CO1	Summarise the chapter (Cha. Chi. 20/48)	CK	NK	K	DIS,L,L&PPT , TBL,L&GD	CL-PR,VV-Viva,Log book	F&S	II	-	LH

Topic 22 Cha. Chi.21.Visarpa Chikitsitam (LH :1 NLHT: 0 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO1	Explain Nidana, Samanya Samprapti, Purvarupa, Bheda of Visarpa (Cha. Chi. 21/11-39)	CC	MK	KH	BS,L&PPT ,L&GD,L	PUZ,M-POS,M-CHT,QZ	F&S	II	-	LH
CO1	Define and explain Upadrava (Cha. Chi. 21/40)	CK	MK	K	L&GD, L_VC,L&PPT	QZ	F&S	II	-	LH
CO2	Describe Sadhyasadhyata of Visarpa (Cha. Chi. 21/42)	CC	MK	KH	L,L&PPT ,L&GD,BS	O-QZ,QZ , PUZ,INT,CR-RED	F&S	II	-	LH
CO3	Discuss the Chikitsa Siddhanta as per Awastha of Visarpa (Cha. Chi. 44-49, 68-70,116-117,141-143)	CAP	MK	KH	L&PPT ,L&GD, CBL,PER,L	C-VC,INT, S-LAQ	F&S	II	-	LH
CO2	Enlist Bahiparimarjana Chikitsa in Visarpa (Cha. Chi. 21/100-106)	CK	DK	KH	L&PPT ,DA,L&GD,L,DIS	P-VIVA,T-OBT,P-EXAM	F&S	II	-	LH
CO1	Differentiate the Chikitsa Siddhanta of Kushtha & Visarpa	CAN	MK	KH	L_VC, ML,SDL,L&GD,EDU	T-CS, C-VC,CL-PR	F&S	II	-	LH
CO1	Summarise the chapter (Cha. Chi. 21/144-146)	CC	NK	KH	DIS,L&PPT	RK,SBA,COM,Log book,SA	F&S	II	-	LH

Topic 23 Cha. Chi.22.Trishna Chikitsitam (LH :1 NLHT: 0 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO1	Analyse Nidana Panchaka of Trishna (Cha. Chi. 22/4-23)	CAN	MK	KH	BS,L&GD,L&PPT ,L	CL-PR,INT,P-POS	F&S	II	-	LH
CO3	Discuss the Samanya Chikitsa of Trishna (Ch. Chi. 22/25,26)	CAP	MK	KH	L&GD,CBL,L&PPT	P-PS,INT,DEB	F&S	II	-	LH
CO2	Interpret the vishesha chikitsa siddhant of Trishna (Cha. Chi. 22/40-56)	CE	MK	KH	L&GD,L,L&PPT ,CBL	T-CS,CL-PR,QZ ,PUZ	F&S	II	-	LH
CO6	Discuss the indications of Shita Jala, Ushna Jala, Alpa Jala Sevana in Trishna (Cha. Chi. 22/57-,62)	CK	DK	KH	L,TPW,L&GD,L&PPT ,PBL	P-VIVA,M-POS,P-SUR	F	II	-	LH
CO3	Discuss the Chikitsa Sutra of Kshayaja Trishna (Cha. Chi. 22/50)	CAP	DK	KH	L,L&GD,L&PPT ,RLE	INT,SP	F&S	II	-	LH
CO2	Analyse Sadhya Asadhyata of Diseases based on Upsargaja Trishna (Cha. Chi. 22/17-18)	CE	MK	KH	L,L_VC ,PrBL,L&PPT ,L&GD	T-CS,PRN	F&S	II	-	LH
CO1	Summarise the chapter (Cha. Chi. 22/63)	CK	NK	K	SDL	T-OBT,P-VIVA	F&S	II	-	LH
Topic 24 Cha. Chi.23.Visha Chikitsitam (LH :1 NLHT: 0 NLHP: 0)										

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO8	Discuss Visha Chikitsa (Cha.Chi. 23/35-37)	CK	NK	KH	TUT,SY ,D-M,L &PPT ,PL	PRN,QZ ,P UZ,P-VIVA	F	II	-	LH
CO1	Summarise the chapter (Cha. Chi. 23/254)	CC	NK	K	L&GD, L&PPT	T-OBT,INT	F&S	II	-	LH
Topic 25 Cha.Chi.24.Madatyaya Chikitsitam (LH :1 NLHT: 0 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO2	Enlist criteria for assessing different stages of Mada (Cha. Chi. 24/41-51)	CAP	MK	KH	L&PPT ,ML,CB L,L&G D	P-VIVA,O-GAME,WP	F&S	II	-	LH
CO1	Explain the chikitsa sutra of Madatyaya (Cha. Chi. 24/107-110)	CC	MK	KH	L&GD, L&PPT ,DIS	CL-PR,INT ,PRN	F&S	II	-	LH
CO6	Discuss the concept of Tadarthakari Chikitsa in Madatyaya (Cha. Chi. 24/117)	CAP	DK	KH	BS,L&P PT ,PL	INT,P-VIV A,RK,T-CS	F&S	II	-	LH
CO6	Discuss in detail about the ingredients ,Guna, Karma, Anupana, Aushadha Sevana Kala of Ashtang Lavana(Cha. Chi. 24/177-178)	CK	DK	KH	L_VC,L &PPT ,LS	PUZ,INT,P-EXAM	F&S	II	-	LH
CO2	Discuss the importance Ksheera Prayoga in Madatyaya (Cha. Chi. 24/195)	CAP	MK	KH	PER,DI S,L&PP T	INT,P-VIVA,PRN	F&S	II	-	LH
CO1,	Explain Lakshana and Chikitsa of Dhwamsaka & Vikshaya (Cha.	CAN	DK	KH	PER,L&	PUZ,PRN,S	F&S	II	-	LH

CO3	Chi.24/199-205)				PPT	P				
CO1	Summarise the chapter (Cha. Chi. 24/207-211)	CC	NK	KH	L&GD, SDL,L &PPT	P-VIVA,T-OBT	F&S	II	-	LH
Topic 26 Cha.Chi.25.Dwivraniya Chikitsitam (LH :1 NLHT: 0 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO1	Discuss the importance of Trividha Pariksha (Cha. Chi. 25/22-23)	CAP	NK	KH	L&GD, L&PPT	P-VIVA,PRN	F&S	II	-	LH
CO1	Discuss Shadvidha Shastrakarma (Cha. Chi. 25/55-60)	CC	NK	K	PBL,L&GD,L&PPT	P-VIVA	F&S	II	-	LH
CO1, CO7	Classify Pathya and Apathya Aahara as per different Vargas mentioned in Charaka Sutra Sthana	CC	NK	K	LS,PER,CBL,KL,SDL	M-POS,M-CHT,P-VIVA,CL-PR,T-OBT	F&S	II	-	LH
CO1	Summarise the Chapter (Cha.Chi. 25/120-121)	CK	NK	K	SDL,L_VC,ML,KL,L&GD	T-OBT,Log book,COM	F&S	II	-	LH
Topic 27 Cha. Chi.26. Trimarmiya Chikitsitam (LH :1 NLHT: 0 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO2, CO3	Discuss the Lakshana and Chikitsa of Udavrta (Cha. Chi. 26/5-31)	CC	MK	KH	CBL,L&PPT , L&GD, L	PUZ,PA,INT,SP	F&S	II	-	LH

CO1	Enlist the samkhya Samprapti of Mutrakricha, Hridroga, Pratishaya, Shiroroga, Mugharoga, Arochaka	CC	DK	K	L&GD, L&PPT	O-QZ,QZ	F&S	II	-	LH
CO1	Analyse Nidanapanchaka of Mutrakricha, Hridroga, Shiroroga,Arochaka (Cha. Chi. 26/32-76,77-100,104)	CAP	MK	KH	L&GD, L&PPT	VV-Viva,INT,M-CHT	F&S	II	-	LH
CO2	Explain Chikitsa Sutra of Hridroga (Cha. Chi. 26/101,102)	CK	MK	KH	BS,L&PPT ,L&GD	S-LAQ,PUZ,INT,CL-PR,QZ	F&S	II	-	LH
CO6	Enlist and discuss ingredients and properties of various Dravyas in Varga/ Mahakashaya from Samhita used in management of Mutravaha Sroto Dushti-Vikara	CAP	NK	KH	KL,LS, SDL,TPW	P-VIVA,RK,CHK,INT,VV-Viva	F&S	II	-	LH
CO6	Explain in detail about the ingredients and various indications mentioned for Hinguvarchadi Churna, Mahanila Taila,.Sahacharadi Taila, Mishraka Sneha	CAN	DK	SH	L&GD, SY	P-VIVA,DOAP,VV-Viva	F&S	II	-	LH
CO1	Summarise the chapter (Cha. Chi. 26/294)	CC	NK	KH	L&PPT ,L&GD	INT,Log book,RK	F&S	II	-	LH
Topic 28 Cha.Chi.27.Urusthambha Chikitsitam (LH :1 NLHT: 0 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO1	Discuss the Nidana Panchaka of Urustambha (Cha. Chi. 27/08-19)	CC	MK	KH	CBL,L &PPT	PUZ,T-CS,CL-PR	F&S	II	-	LH
CO2	Explain Chikitsa Sutra of Urusthambha (Cha. Chi. 27/25, 60-61)	CK	MK	KH	ML,L&PPT ,BL,FC	RK,INT,Log book	F&S	II	-	LH
CO1, CO2	Justify contraindications of Panchakarma in Urustambha Chikitsa (Cha. Chi. 27/20-24)	CAP	MK	KH	CBL,L &PPT ,L&GD	INT,P-VIVA,S-LAQ	F&S	II	-	LH

CO6	Discuss ingredients and various indications of Ashtakatwara Taila, Shringeshtyadi Churna.	CK	DK	KH	L_VC,L&GD,TBL,L&PPT	DEB	F&S	II	-	LH
CO6	Evaluate role of Gurvadi Guna of Dravya used in the management of Urustambha	CAP	NK	KH	SDL,KL	PUZ,CBA	F&S	II	-	LH
CO1	Disscuss the Vihara advised in the management of Urustambha (Cha. Chi. 27/58-60)	CAP	NK	K	BS,DIS,L&GD	SP,RK,M-CHT,Log book	F	II	-	LH
CO1	Summerise the chapter	CC	NK	K	L&GD,L&PPT,L	COM,Log book,RK	F&S	II	-	LH
Topic 29 Cha.Chi.28.Vatavyadhi Chikitsitam (LH :2 NLHT: 0 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO1	Describe Nidana, Samprapti, Purvaroopa, Samanya Lakshana of Vatavyadhi (Cha. Chi. 28/15-23)	CK	MK	K	L,L&PPT,L&GD	INT, C-VC,T-CS	F&S	II	-	LH
CO1	Discuss different Sthanagatavata Lakshana (Cha. Chi. 28/24-37)	CC	MK	KH	L&GD,BL,PL	INT,SP,P-EXAM	F&S	II	-	LH
CO1	Explain Samprapti and Lakshana of Ardita and Pakshaghata (Cha. Chi. 38-42, 53-55)	CAN	MK	KH	L&PPT,CBL,L&GD	SBA,CBA	F&S	II	-	LH
CO1, CO2	Elaborate Nirupasthambha Vatavyadhi Chikithsa (Cha. Chi. 28/75)	CAN	MK	KH	L&GD,FC,L,L&PPT	P-VIVA,T-CS,INT,OSCE,Mini-CEX	F&S	II	-	LH

CO2, CO3	Describe Chikitsa Sutra of Ardita (Cha. Chi. 28/99)	CC	MK	KH	L&PPT ,CBL,L &GD,L	P-VIVA,T-CS,P-EXAM,T-OBT	F&S	II	-	LH
CO2	Explain different Sthanagata Vata Chikitsa (Cha. Chi. 28/89-95)	CAP	MK	KH	DIS,BS, L,L&PPT	P-VIVA,PM, C-VC,DEB, P-EXAM	F&S	II	-	LH
CO2, CO3	Describe Lakshana and Chikitsa of Pakshaghata (Cha. Chi. 28/53,100)	CAP	MK	KH	CBL,L &GD,L, L&PPT	INT,OSCE, CWS ,SBA,CBA	F&S	II	-	LH
CO2, CO3	Differentiate Khalli and Gridhrasi (Cha. Chi. 28/56,57)	CC	MK	KH	L,PL,L &PPT	CBA,P-VIVA	F&S	II	-	LH
CO6	Discuss ingredients, Guna, Karma of Balataila (Cha. Chi. 28/148-166), Rasnataila (Cha. Chi. 28/165-167)	CC	MK	KH	FC,L&PPT ,L	INT,RK	F&S	II	-	LH
CO1, CO2	Analyze and classify the correlation of Vatavyadhi with Dhatu, Upadhatu, Srotas, and Rogamarga	CAP	DK	KH	SDL,BL ,FC,L& GD	PUZ,INT, M-CHT,O-QZ	F&S	II	-	LH
CO2	Discuss Chikitsa Siddhanta of Upasthambhita Vatavyadhi (Cha, Chi. 28/184,186,194,195,196,202,203,204,205,212,219,222,245,246,247)	CK	MK	KH	BS,PL, L&GD	PUZ,QZ ,O-QZ	F&S	II	-	LH
CO1	Summarise the chapter (Cha. Chi. 28/248-249)	CK	NK	K	SDL	RK,VV-Viva	F&S	II	-	LH
Topic 30 Cha.Chi.29.Vatashonita Chikitsitam (LH :1 NLHT: 0 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO1	Describe Nidana, Samprapti, Purvaroopa, Lakshana, Bheda and	CAN	MK	KH	L,L&G	C-VC,T-	F&S	II	-	LH

	Sadhyasadhyata of Vatrakta (Cha. Chi. 29/5-34)				D,L&PPT	CS				
CO3	Differentiate Utthana, Gambhira and Ubhayashrita Vatarakta (Cha. Chi. 29/19-23)	CK	MK	KH	L,L&GD,L&PPT	QZ ,WP,PUZ,O-GAME,O-QZ	F&S	II	-	LH
CO2	Explain Utthana and Gambhira Vatashonita Chikitsa Sutra (Cha.Chi .29/41-48,158,160)	CAN	MK	KH	L,CBL,L&PPT,BS	INT,PA,CR-W	F&S	II	-	LH
CO2, CO3	Describe importance of Ksheera Basti Chikitsa in Vatarakta (Cha.Chi. 29/88)	CAP	MK	K	L&PPT,L&GD,L	INT,VV-Viva	F&S	II	-	LH
CO6	Discuss in detail about the ingredients, Guna, Karma of Pindataila (Cha.Chi. 29/123)	CAP	DK	K	L,L&PPT ,KL	VV-Viva,RK	F&S	II	-	LH
CO1	Summarise the chapter(Cha.Chi. 29/163-165)	CK	NK	K	L,L&PPT ,L&GD	T-OBT,QZ	F&S	II	-	LH
Topic 31 Cha.Chi.30.Yonivyapad Chiktsitam (LH :1 NLHT: 0 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO1	Discuss Yonivyapad types, Lakshana and Chikitsa. Cha.Chi.30/9-36,41-42, 45)	CAP	MK	K	ML,L&GD,EDU	P-VIVA	F&S	II	-	LH
CO1	Discuss and explain the chikithsa pariksha vishayas (Cha.Chi.30/ 293-333)	CAP	DK	K	L,RP,L&PPT ,KL	M-POS,M-CHT,INT	F	II	-	LH
CO1	Explain the concept of anuktha vyadhis(Cha.Chi.30/291-292)	CC	DK	K	PL,L&	S-LAQ	F&S	II	-	LH

					GD,L& PPT ,L					
CO1, CO2	Explain Shukra Dosha, hetu,Lakshana, and Chikitsa. Cha. Chi.30/133-153)	CK	DK	K	L&GD	T-OBT	F&S	II	-	LH
CO1, CO2	Explain Klaibya bhedha, lakshana, Sadhyaasadhyata and Chikitsa, Cha.Chi.30/155-224)	CK	DK	KH	L&PPT ,L&GD	T-OBT,T-CS	F&S	II	-	LH
CO1, CO2, CO3	Explain Pradara hetu, Samprapti, Lakshana and Chikitsa. (Cha.Chi.30/205-224)	CK	DK	K	L&GD	T-CS,T-OBT	F&S	II	-	LH
CO1, CO2	Explain Aoushadhi Sevana Kala (ChaChi.30/294-312)	CK	DK	K	L&GD, L&PPT ,L	T-OBT,T-CS	F&S	II	-	LH
CO1, CO2, CO3	Explain The Importance of pathya Ahar (Cha.Chi.30/329-333)	CC	DK	K	L&GD, L&PPT	T-OBT	F&S	II	-	LH
CO1	Summarise chapter(Cha Chi 30/334-339)	CC	NK	K	L	P-VIVA	F&S	II	-	LH
Topic 32 Cha. Ka.1Madanakalpam (LH :1 NLHT: 0 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO1	Define prayojana (objective) of kalpasthana and define Vaman and Virechana (Cha.Ka. 1/4)	CK	MK	K	L,L&PPT	P-EXAM,VV-Viva	F&S	II	-	LH
CO1	Describe the Mode of action of Vamana and Virechana Dravya and compare with charecteristics of Urdhvagami and Adhogami Dravya. (Cha.Ka 1/5-6)	CC	MK	K	L&PPT ,L,L&GD	P-POS,P-VIVA,VV-Viva,T-OBT	F&S	II	-	LH
CO1	Identify features of Trividha Desha in different geographical areas(Cha.Ka.1/8)	CAP	MK	KH	L&PPT ,L,L&G	T-OBT,VV-Viva,P-	F&S	II	-	LH

					D	VIVA,T-CS				
CO1	Discuss the Shreshthata of Madanphala among other Vamaka Dravyas (Cha.Ka. 1/13)	CC	MK	K	L,L&PPT	PRN,DEB, P-VIVA	F&S	II	-	LH
CO1, CO6	Evaluate procedure of Maadanaphala Sanskara for Vamana purpose Cha.Ka 1/13)	CC	MK	K	L&GD, L&PPT ,L	VV-Viva,P-VIVA,PP-Practical	F&S	II	-	LH
CO6	Explain Madanaphala Samgraha and Prayog Vidhi (Cha.Ka.1/13)	CC	MK	KH	L,L&GD,L&PPT	P-VIVA,T-OBT	F&S	II	-	LH
CO6	Enumerate Yogas of Madanaphala (Cha.Ka. 28-30)	CC	NK	K	L&PPT ,L	P-VIVA,T-OBT	F&S	II	-	LH
CO1	Enlist the Madanaphala Paryaya (Cha.Ka. 1/27)	CC	MK	K	REC,L, L&PPT	VV-Viva,T-OBT,P-VIVA	F&S	II	-	LH
CO1	Explain Adhyaya Sangraha (Cha.Ka.1/28-30)	CC	NK	K	L&PPT ,L	P-VIVA,T-OBT	F&S	II	-	LH
Topic 33 Cha.Ka.2 to 6 (LH :1 NLHT: 0 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO1	Describe Yogya Roga and Rogi for Jivamutak , Ikshvaku, Dhamargava . Vatsaka and Kritavedhana Kalpam Jimutaka, (Cha.Ka.2/4) (Cha.Ka.3/4) (Cha.Ka.4/4) (Cha.Ka.5/6)	CC	DK	K	L&GD	PRN	F&S	II	V-DG	LH
CO6	Explain Paryaya and Guna of Jivamutak , Ikshvaku, Dhamargava . Vatsaka and Kritavedhana Kalpam. (Cha.ka 2/3-4) (Cha.Ka.3/3-4) (Cha.Ka.4/3-4) (Cha.Ka.5/3-5) (Cha.	CC	DK	K	PL,PER	Log book,COM,VV-Viva	F&S	II	-	LH

	Ka. 6/3-4)									
CO1	Enumerate yogas of Jimutaka , Ikshvaku, Dhamargava ,Vatsaka, and Kritavedhana Kalpam. (Cha.Ka.2/ 14-15) Cha.Ka. 3/ (Cha.Ka.4/19-20), (Cha.Ka 5/12) (Cha.Ka.6/13-14)	CK	DK	K	L&GD, L	Log book,T-OBT	F&S	II	-	LH
Topic 34 Cha.Ka.7.Shyamatrivrutta Kalpam (LH :1 NLHT: 0 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO1, CO2, CO6	Enlist the Paryaya, Guna, indication (Cha.Ka.7/3-7)	CC	MK	K	L,L&PPT	T-OBT,P-VIVA	F&S	II	-	LH
CO1, CO2	Describe Bhedha , Samgraha and Prayoga Vidhi (Cha.Ka.7/8-11)	CC	MK	K	L&PPT ,L	T-OBT,P-VIVA	F&S	II	-	LH
CO1, CO6	Explain Rutuanusruta Trivrita Prayoga (Cha.Ka.7/56-64).	CC	NK	K	L,L&PPT	T-OBT,P-VIVA	F&S	II	-	LH
CO1	Explain the Adhyaya Sangraha (Cha.Ka. 7/77-80)	CC	NK	K	L&PPT ,L	VV-Viva	F&S	II	-	LH
CO1, CO2	Explain Yogas ingredients and Indications of Kalyanaka Guda, Vyoshadi Gutika . (Cha.Ka.7/40-45) (Cha.Ka.7/46-49)	CC	DK	KH	DIS,L&GD	T-OBT,T-CS,P-REC	F&S	II	-	LH
Topic 35 Cha.Ka.8. to 11 (LH :1 NLHT: 0 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO1	Explain Samgrah and Prayoga vidhi of Chaturangula, Tilvaka , Sudha , Saptalashankhini. (Cha.Ka 8/6-7) (Cha.Ka9/4-5) (Cha.Ka10/.3-9) (Cha.Ka11/5)	CC	NK	D	FC	PRN,VV-Viva	F&S	II	-	LH

CO6	1. Explain Paryaya,Gunas ,Indications of Chaturangula, Tilvaka , Sudha , Saptalashankhini.. (Cha,Ka8/.3-5) (Cha.Ka.9/3) (Cha.Ka 10/3-9), (Cha.Ka.11/3-5)	CK	DK	K	PER	PP-Practical,VV-Viva, COM,PA	F&S	II	-	LH
CO1	Enumerate yogas of Chaturangula Kalpam, Tilvaka kalpam, Sudha Kalpam, Saptalashankhini kalpam. (Cha.Ka 8/17-18) (Cha.Ka.9/17-18) (Cha.Ka 10/21-22) (Cha.Ka 11/18-19)	CC	DK	K	L&GD	T-OBT	F&S	II	-	LH
Topic 36 Cha.Chi.12.Dantidravanti Kalpam (LH :1 NLHT: 0 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO1	Enlist the Dantidravanti Paryaya (Cha.Ka.12/3)	CC	MK	K	L&PPT,L	P-VIVA,T-OBT	F&S	II	-	LH
CO1, CO6	Explain the Samgraha and Prayoga Vidhi of Dantidravanti. (Cha.Ka.12/4)	CC	MK	K	L,L&PPT	T-OBT	F&S	II	-	LH
CO1	Enlist Dantidravanti Guna(Cha.Ka.12/6)	CC	MK	K	L,L&PPT	P-VIVA,T-OBT	F&S	II	-	LH
CO2, CO6	Explain the Dantidravanti Yoga	CC	NK	K	L&PPT,L	P-VIVA,T-OBT	F&S	II	-	LH
CO1	Explain Adhyaya Sangraha (Cha.Ka.12/36-40)	CC	NK	K	L,L&PPT	VV-Viva,P-VIVA	F&S	II	-	LH
CO1	Explain the Number of emetic and purgative formulations prepared out of fifteen important drugs. (Cha.Ka.12/41-42)	CC	NK	K	L,L&PPT	T-OBT,P-VIVA	F&S	II	-	LH
CO1	Describe the importance of Bhavana, Samyoga of Dravyas in formulating medicines(Cha. Ka 47-48).	CC	NK	K	L&PPT,L	T-OBT,P-VIVA	F&S	II	-	LH
CO1	Explain trividha yoga of Vaman -virechaka Aoushadhi of Tikshnatva, Madhyatva and Mrudu.(Cha. Ka. 12/51-52)	CC	NK	K	L,L&PPT	T-OBT,P-VIVA	F&S	II	-	LH

CO1	Explain indications of Tikshana, Madhya, Mrudu Bheshaja.	CC	NK	K	L,L&PPT	P-VIVA,T-OBT	F&S	II	-	LH
CO3	Explain Chikitsa in case Virechana Aushadha coming out from Urdhva , Things to do in case of Dosha Apravritti, Things to do when Ati Pravritti of Dosha.	CC	MK	K	L&PPT,L	T-OBT,P-VIVA	F&S	II	-	LH
CO1	Explain indications of Snigdha Virechana and Ruksha Virachana. (Cha.ka 12/83-85)	CC	NK	K	L,L&PPT	T-OBT,P-VIVA	F&S	II	-	LH
CO1	Explain Vidhipurvaka Samshodhana Prayoga (Cha.Ka 12/57)	CC	NK	K	L,L&PPT	P-VIVA,T-OBT	F&S	II	-	LH
CO1	Describe Dravya Pramana based on Koshtha. (Cha.Ka.12/86)	CC	NK	K	L&PPT,L	T-OBT,P-VIVA	F&S	II	-	LH
CO1	Enlist the classical measurements and its comparasion with International System of Unit.	CC	NK	K	L&PPT,L	T-OBT,P-VIVA	F&S	II	-	LH
CO1	Explain the Quantity to be taken of Sadyodhruta Dravya.(Cha. Ka.12/98-99)	CC	NK	K	L&PPT,L	P-VIVA,T-OBT	F&S	II	-	LH
CO1	Explain the Sneha Paka Paribhasha and their imporatnce, Utility. (Cha.Ka.12/102-103)	CC	NK	K	L,L&PPT	P-VIVA,T-OBT	F&S	II	-	LH
CO1	Explain Magadha maan Paribhasha and Importance (Cha.Ka.12/87-97)	CC	NK	K	L,L&PPT	T-OBT,P-VIVA	F&S	II	-	LH
CO1	Explain Kalpasthana Sangraha (Cha Ka. 12/ 106-107)	CC	NK	K	L,L&PPT	P-VIVA,T-OBT	F&S	II	-	LH
Topic 37 Term 2 Non Lecture theory Activities (LH :0 NLHT: 33 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO1	Apply Fundamental Principle of Samhita in diagnosis,	CAP	MK	KH	TBL,L	Log book,I	F	II	-	NLHT37.1

	interpretation, treatment planning, selection of formulations and appropriate dosage form, Kaala, Anupan etc.				&GD,FC	NT,P-VIVA				
CO1, CO2	Appraise Sambhasha on different topics of Samhita.	AFT-VAL	MK	SH	D	P-VIVA	F&S	II	-	NLHT37.2
CO1	Conduct Cross sectional study of Samhita	CAP	MK	KH	L&GD	INT,P-VIVA	F	II	-	NLHT37.3
CO1	Compare and analyse Charaka Samhita and Sushruta Samhita	CC	DK	KH	L&PPT,L&GD	COM	F	II	-	NLHT37.4
CO2, CO3, CO6	Perform Samhita based analysis of Diseases.	CAP	MK	KH	D-BED	RK,CBA,VV-Viva	F&S	II	-	NLHT37.5
CO7	Review and summarize Published Articles on different aspects, topics of Samhita.	CAP	MK	KH	L&GD, TBL	RK,INT	F	II	-	NLHT37.6
CO1, CO2	Illustrate the Concept mapping of Samprapti and Chikitsa	CAP	MK	K	DIS	P-VIVA	F	II	-	NLHT37.7
CO1	Comparative Analysis of Chikitsa Siddhanta of Charaka Samhita and Sushruta Samhita	CC	MK	K	D	P-VIVA	F&S	II	-	NLHT37.8
CO7	Integrate Chikitsa concepts of Samhita with contemporary medical science	CAN	MK	KH	TBL,L&GD	RK,INT	F	II	-	NLHT37.9
CO1	Evaluate and describe Samhita with the help of Tantrayukti	CC	MK	KH	SDL	RK,Log book,VV-Viva,INT	F	II	-	NLHT37.10
CO1, CO2	Perform interview of senior Vaidya.	CAP	MK	KH	TBL,L&GD	INT,RK	F	II	-	NLHT37.11
CO1	Interpret and decode Samhitas with commentary.	CC	NK	KH	TBL,RE	CBA,RK,V	F&S	II	-	NLHT37.1

					C,L&G D	V-Viva				2
CO1	Recite memorise and recall important Shloka	CC	MK	K	SDL	P-REC	F&S	II	-	NLHT37.1 3

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 37.1	Fundamental Principle of Samhita used in diagnosis, interpretation, treatment planning, selection of formulations and appropriate dosage form, Kaala, Anupan etc.	Refer NLHT 17.1
NLHT 37.2	Conducting Sambhasha on different topics of the Samhita	Refer NLHT17.2 **Second Term Suggested Topics (1 hour)** Concept of Dosha Gati in Shakhashrita and Kosthashrita kamala/ Concept of Upadrava and its management/ Concept of Avarana and its management etc.
NLHT 37.3	Cross sectional study of Samhita	Refer NLHT 17.3 **Second Term** Irregular Sleep Patterns: A Significant Cause of Disease (Vyadhi)/ Asatmya Indriyartha Samyoga: A Key Etiological Factor in Disease/ Concept of Gata Vata and Avarana Vata: Differentiating Two Pathological States/ Bahirparimarjana Chikitsa in Vata-Rakta: External Therapies for Vata-Rakta Disorders etc.
NLHT 37.4	Comparative study of Charaka Samhita and Sushruta Samhita	Refer NLHT17.4 **Second Term (4 hours)** Cha.Chi. 16- Su Ut. 44 Cha. Chi.26 - Su Ut. 43 Cha. Chi. 17, Su. Ut..50, Su. Uttar 51

		Cha Chi. 18/ Su Ut. 52
NLHT 37.5	Samhita Based Analysis of Diseases	Refer NLHT 17.5 **Second Term (4 hours)** Cha. Chi. 16 - Case of Pandu Cha. Chi. 17 - Case of Shwas Cha. Chi. 18 - Case of Kasa Cha. Chi. 28 - Case of Gridhrasi/Sandhigata Vata/ Pakshaghata
NLHT 37.6	Review of Published Articles from Samhita	Refer NLHT 17.6 **Second Term (2 hours)** Pandu, Kamala, Tamakshwas, Kasa, Gridhrasi, Ardita, Pakshaghata. etc
NLHT 37.7	Concept mapping of Samprapti and Chikitsa	Refer NLHT 17.7 **Second term (2 hours)** Case of Pandu, Kasa, Shwasa, Gridhrasi, Ardita, Pakshaghata etc.
NLHT 37.8	Comparative Analysis of Chikitsa Siddhanta of Charaka Samhita and Sushruta Samhita	Refer NLHT 17.8 **Second Term (2 hours)** Ardita of Charaka Samhita and Sushruta Samhita, Udavarta Chikitsa of Charaka and Sushruta Samhita, Shwas Chikitsa of Charaka and Sushruta
NLHT 37.9	Integrative activities - Compare Chikitsa concepts of Samhita with contemporary medical science	Refer NLHT 17.9 **Second Term (2 hours)** Ardita and Bell’s palsy, Gridhrasi and Sciatica, Sandhivata and Osteoarthritis etc.
NLHT 37.10	Evaluation by Tantrayukti	Refer NLHT 17.10

		Second Term (2 hours) Cha. Chi. 17/ 88 70- 76, 92-93,148 Cha. Chi. 18/ 31, 32- 34 Chi. 20/ 5, 35, 41-44 Cha. Chi. 23/ 61-62
NLHT 37.11	Interview of senior Ayurveda Vaidya	Refer NLHT17.11
NLHT 37.12	Exploring Vyakhya	Refer NLHT 17.12 **Second Term (4 hours)** Cha. Chi. 17/147-150. Cha Chi.21/40 Cha. Chi 27/20-24 Cha. Chi. 28/72-74 Cha Chi 29/3-11
NLHT 37.13	Recite, Memorise and recall Shlokas	Refer NLHT 17.13 **Second Term (6 hours)** Cha.Chi.16/40, 93-96,116, 118, 130-131 Cha. Chi. 17/71-72, 88-90, 121-122 Cha. Chi. 18/32-34, 83, 108, 131-133, 149-150 Cha. Chi. 19/14-15,19 Cha. Chi. 20-22, 41 Cha. Chi. 21/49 ,142 Cha. Chi. 22/19, 57, 58 -59 Cha. Chi. 23/14-17, 24, 221-222 Cha. Chi.24/107-108 Cha. Chi. 25/26, 86

		Cha. Chi. 26/3, 4 Cha. Chi. 27/25-27, 47 Cha. Chi.28/3,19,75,76,99,101 Cha. Chi. 29/35,36,41,82, 83,88,123 Cha Chi. 30/ 8-38, 298, 302

Topic 38 Cha. Si.1.Kalpana Siddhi (LH :1 NLHT: 0 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1	Describe the guidelines to be followed during Snehana, Swedana and Enlist the benefits of Snehana and Swedana (Ch.Si.1/6-8)	CC	MK	KH	L,L&PPT	T-OBT,VV-Viva	F&S	III	-	LH
CO1	Describe the diet recommended prior to Vamana and Virechana (Ch.Si.1/8-9)	CK	MK	KH	L,L&GD,L&PPT	T-OBT,VV-Viva	F&S	III	-	LH
CO1	Describe the ideal conditions for performing Vamana and Virechana (Ch.Si.1/9-10)	CK	MK	KH	L,L&GD,L&PPT	T-OBT,VV-Viva, C-VC ,PP-Practical	F&S	III	-	LH
CO1, CO3	Explain the importance of Samsarjana Krama and its benefits (Ch.Si.1/11-12)	CK	MK	KH	CBL,L&GD,L,L&PPT	T-OBT,VV-Viva	F&S	III	-	LH
CO5	Describe the Antiki, Maniki, Vaigiki and Laingiki Pariksha for assessment of Vamana and Virechana (13-14)	CC	MK	KH	L,CBL,L&GD,L&PPT	VV-Viva,T-OBT,CL-PR	F&S	III	-	LH
CO2, CO3, CO5	Explain the Samyak yoga, Ayoga and Atiyoga lakshana of Vamana (Ch.Si. 1/15-16)	CK	DK	K	L&GD,L&PPT,L	T-OBT,VV-Viva	F&S	III	-	LH

CO2, CO3, CO5	Describe the Samyak yoga, Ayoga and Atiyoga lakshana of Virechana (Ch.Si. 1/17-19)	CK	DK	K	L&PPT,L,L&GD	VV-Viva,CL-PR,T-OBT	F&S	III	-	LH
CO2, CO3, CO5	Explain the mode of action of Basti (Ch.Si.1/40-41)	CK	MK	K	L&GD,L,L&PPT	T-OBT,VV-Viva,M-POS,M-CHT	F&S	III	-	LH
CO1, CO2	Describe the importance of Basti (Ch.Si.1/38-39)	CK	MK	KH	L&PPT,CBL,L&GD,L	T-CS,VV-Viva	F&S	III	H-PK	LH
CO2, CO3, CO5	Describe the Niruha and Anuvasan Basti Samyak-yoga - Ayoga and Atiyoga Lakshana (Ch.Si. 1/ 40-46)	CC	MK	KH	L&PPT,L&GD,L	VV-Viva,T-OBT	F&S	III	-	LH
CO1, CO2	Enlist the Number of Karma, Kala and Yoga Basti (Ch.Si.1/47-48)	CC	MK	K	L&PPT,L&GD,L	T-OBT,VV-Viva	F&S	III	-	LH
CO2, CO3	Enlist the number of Anuvasana Basti in Vata, Pitta and Kapha Dosha Adhikya (Ch.Si.1/49)	CK	MK	K	L,L&GD,L&PPT	VV-Viva,T-OBT	F&S	III	-	LH
CO2, CO5	Describe the Shirovirechana Samyak yoga-Ayoga-Atiyoga (Ch.Si.1/51-52)	CC	MK	K	L&GD,L,L&PPT	T-OBT,VV-Viva	F&S	III	-	LH
CO2, CO3	Describe benefits of Panchakarma Chikitsa (Ch.Si.1/53)	CC	MK	KH	L&PPT,L&GD,L	T-OBT,VV-Viva	F&S	III	-	LH
CO2, CO3	Describe the Parihar Kala suggested for Panchakarma treatment (Ch.Si.1/54)	CK	MK	KH	L&PPT,L,L&G	T-OBT,VV-Viva	F&S	III	-	LH

					D					
CO2	Explain the factors to be avoided during Panchakarma (Ch.Si.1/54-55)	CK	NK	K	L&GD, L&PPT ,L	T-OBT,VV-Viva	F&S	III	-	LH
CO1	Summarize the chapter as per Sutra (Ch. Si 1/60)	CK	NK	K	SDL	T-OBT,VV-Viva	F&S	III	-	LH
Topic 39 Cha.Si.2.Panchakarmiya Siddhi (LH :1 NLHT: 0 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO1	Enlist the ayogya purushas for Panchakarma (5-7)	CK	DK	KH	L&PPT ,L&GD, L	VV-Viva,T-OBT	F&S	III	-	LH
CO1	Describe indications and contraindications for all Panchakarma procedures Cha.Si (4-6)	CC	MK	K	L&PPT ,L,CBL	VV-Viva,T-OBT	F	III	-	LH
CO1, CO2	Identify Patients contraindicated and indicated for Various Panchakarma procedures,Vamana 8-10,Virechana 9-12,Asthapana Basti 14-16,Anuvasana Basti 17-19,Shirovirechana 20-22,Best season for all Panchakarma-s (23)	CC	DK	K	L,CBL, L&PPT	T-OBT,VV-Viva	F&S	III	-	LH
CO1	Summarize the Chapter Cha. Si 24	CC	NK	K	SDL	T-OBT,VV-Viva	F&S	III	-	LH
Topic 40 Cha.Si.3.Bastisutriyam Siddhi (LH :1 NLHT: 0 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO1	Describe the questions by Agnivesa regarding Basti (Cha.Si.3/3-5)	CK	MK	K	IBL	VV-Viva,T-OBT	F&S	III	-	LH
CO2	Describe the yogya and ayogya before administration of basti	CC	MK	K	L,DIS,L	M-CHT,M-	F&S	III	-	LH

	(Cha.Si.3/6)				&GD,L &PPT ,BL	POS,VV-Viva,T-OBT				
CO1	Describe the structure of Basti Netra & its features (Cha.Si.03/8-12)	CK	MK	K	D-M	T-OBT,VV-Viva,P-MOD	F&S	III	-	LH
CO1	Describe the Preparation and administration of basti formulation (Cha.Si.3/13-19)	CC	MK	KH	L&GD, L_VC,L &PPT ,D,L	VV-Viva,T-OBT	F&S	III	-	LH
CO5	Analyze the consequences of improper nozzle administration and its complications (Basti Netra Dosha) as per Cha. Si. 3/20-22	CC	DK	K	L,L&GD,L&PPT	T-OBT,VV-Viva	F&S	III	-	LH
CO1	Justify the sequence of Niruha Basti formulation and the appropriate position for its administration as per Cha. Si. 23-26	CE	DK	K	L,L&GD,L&PPT	VV-Viva,T-OBT	F&S	III	-	LH
CO1, CO2	Describe the guidelines/regimen to be followed after the Niruha Basti administration (Cha.Si.3/27-29,33,34,70)	CC	NK	K	L&PPT ,L&GD, L	T-OBT,CL-PR,S-LAQ	F&S	III	-	LH
CO1, CO2	Discuss the Matra (dosage) of Basti administration based on Dosha dominance as per Cha. Si. 3/30-31.	CC	MK	KH	L&GD, L,L&PPT	VV-Viva,T-OBT	F&S	III	-	LH
CO1, CO2	Discuss the dosage of Niruha Basti, post-Basti dietary regimen, and essential equipment as per Cha. Si. 3/32-34.	CK	MK	K	L,L&PPT ,L&GD	VV-Viva,T-OBT	F&S	III	-	LH
Topic 41 Cha. Si.4.Snehavyapat Siddhi (LH :1 NLHT: 0 NLHP: 0)										

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO2	Explain the various Anuvasana Basti formulations and their indications in different disorders as per Cha. Si. 4/4-22	CK	DK	K	L&PPT ,L	T-OBT,VV-Viva	F&S	III	-	LH
CO1	Describe the benefits of Anuvasana Basti (Cha.Si.4 /22)	CK	DK	K	L,L&PPT ,L&GD	T-OBT,VV-Viva	F&S	III	-	LH
CO5	Explain and discuss the six Vyapat (complications) of Sneha Basti, including their causative factors, symptoms, and Chikitsa, as per Cha. Si. 4/25-41.	CC	MK	K	L&GD, L&PPT ,L	VV-Viva,T-OBT	F&S	III	-	LH
CO5	Describe the factors responsible for Vyapad of Sneha Basti (Cha.Si.4 /26)	CC	MK	K	L,L&GD,L&PPT	T-OBT,VV-Viva	F&S	III	-	LH
CO2	Discuss the guidelines to be followed post-Sneha Basti administration as per Cha. Si. 4/42-45.	CK	DK	KH	L&PPT ,L&GD, L	T-OBT,VV-Viva	F&S	III	-	LH
CO1, CO2	Describe the conditions indicated for daily administration of anuvasana basti (Cha.Si.4/46-47)	CK	MK	KH	L&PPT ,L,L&GD	T-OBT,VV-Viva	F&S	III	-	LH
CO5	Explain the concept of Ama and Pakwa Taila in Anuvasana Basti and its associated complications as per Cha. Si. 4/48-51.	CK	NK	K	L,L&PPT ,L&GD	T-OBT,VV-Viva	F&S	III	-	LH
CO1, CO2	Describe the indications and benefits of matra basti (Cha.Si.4/52-54)	CK	MK	K	L,L&PPT	T-OBT,VV-Viva	F&S	III	-	LH
CO1	Summarize the Chapter based on verses (Cha.Si.4/1-55)	CC	NK	K	SDL	T-OBT,VV-Viva	F&S	III	-	LH

Topic 42 Cha.Si. 5.Netrabastivyapat Siddhi (LH :1 NLHT: 0 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO5	Enumerate and discuss the number of Basti Netra Dosha, Basti Putaka Dosha, and Basti Data/Pranetru Dosha along with their complications as per Cha. Si. 5/3-8.	CC	MK	K	L,L&GD,L&PPT	VV-Viva,T-OBT	F&S	III	-	LH
CO5	Enumerate and discuss the complications arising from improper administration of Basti as per Cha. Si. 5/3, 9-18.	CC	MK	K	L,L&PPT,L&GD	T-OBT,VV-Viva	F&S	III	-	LH
CO1	Explain and discuss the indications of Shodhana in Sadharana Ritu as per Cha. Si. 4-6.	CC	MK	K	SDL	T-OBT,VV-Viva	F&S	III	-	LH
CO1, CO2	Summerize of the Chapter based on Sutras (Cha.Si 5/1-18)	CC	MK	K	L&PPT,L,L&GD,SDL	T-OBT,VV-Viva	F&S	III	-	LH
Topic 43 Cha.Si.6.Vamana Virechana Vyapat Siddhi (LH :1 NLHT: 0 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO1, CO2	Explain and discuss on the Indication of Shodhana in Sadharana Rutu.	CC	MK	K	L,L&GD,L&PPT	CL-PR,T-OBT,VV-Viva	F&S	III	-	LH
CO1	Describe the Importance of Snehana before panchakarma (Cha.Si.6/ 7)	CC	MK	K	L&PPT,L&GD,L	S-LAQ,VV-Viva	F&S	III	-	LH
CO5	Describe the Vaman-Virechana Vyapad-ayoga atiyoga its upadrava and its chikitsa (Cha.Si. 6/29-93)	CC	MK	K	L&PPT,L	VV-Viva,S-LAQ	F&S	III	-	LH
CO1, CO2	Describe Samsarjana kala after Shodhana (Cha.Si.6/57)	CC	MK	K	L&GD,L,L&PP	VV-Viva,M-POS,T-OB	F&S	III	-	LH

					T	T,CL-PR,M-CHT				
CO1	Summarize of the Chapter based on sutras (Cha.Si 6/94)	CC	NK	K	SDL	T-OBT	F&S	III	-	LH
Topic 44 Cha. Si. 7.Bastivyapat Siddhi (LH :1 NLHT: 0 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO5	Describe Aasthapana Basti Vyapat, including its causes, signs, symptoms, and management as per Cha. Si. 7/5-65.	CC	MK	K	L&GD, L&PPT ,L	T-OBT,VV-Viva	F&S	III	-	LH
CO1	Summarize the Chapter based on sutra (Cha.Si.7/66)	CC	NK	K	DIS,L&GD	VV-Viva,T-OBT	F&S	III	-	LH
Topic 45 Cha.Si.8.Prasrita Yogiyam Siddhi (LH :1 NLHT: 0 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO1	Enumerate and discuss on the Types of Prasritika basti (Cha.Si 8/3-14)	CC	MK	K	L&PPT ,L&GD, L	VV-Viva,COM,T-OBT	F&S	III	-	LH
CO5	Describe the Treatment of various complications due to prasrutika basti (Cha.Si.8/14-19)	CC	MK	K	L&PPT ,L,L&GD	T-OBT,VV-Viva	F&S	III	-	LH
CO1	Discuss the types of Pancha-Prasritika Basti and the treatment of various Upadrava arising from its administration as per Cha. Si. 8/43-45.	CK	MK	K	L,L&GD,L&PPT	VV-Viva,COM,T-OBT	F&S	III	-	LH
CO1	Summarize the Chapter (Cha Si.8/46)	CC	NK	K	DIS,SDL	VV-Viva,T-OBT	F&S	III	-	LH
Topic 46 Cha.Si.9.Trimarmiya Siddhi (LH :1 NLHT: 0 NLHP: 0)										

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1	Discuss Importance of Trimarma and Trividha Marma Abhighata Lakshana ,their Chikitsa (Cha.Si.09 /3-10)	CC	MK	K	L&GD, L,L&PPT	T-OBT,VV-Viva	F&S	III	-	LH
CO1, CO2	Describe the Trimarma related diseases, their sankhya lakshana and chikitsa (Cha.Si.09 /11-49, 70-87)	CK	MK	K	L,L&PPT ,L&GD	VV-Viva,T-OBT	F&S	III	-	LH
CO2	Describe the Uttara Basti Vidhi and indications (Cha.Si.09/50-69)	CK	MK	K	L_VC,L ,L&PPT ,L&GD	T-OBT,VV-Viva	F&S	III	H-PK	LH
CO1, CO2	Describe Nasyavidhi its types and indications (Cha.Si.09 /88-117)	CK	MK	K	L&GD, CBL,L, L&PPT ,DIS	VV-Viva,T-OBT	F&S	III	-	LH
CO1	Summarize of the Chapter based on sutra (Cha.Si.9/117-118)	CC	NK	K	SDL	T-OBT,VV-Viva	F&S	III	-	LH

Topic 47 Cha. Si. 10.Basti Siddhi (LH :1 NLHT: 0 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1	Describe the Importance,superiority and types of Basti (Cha.Si.10/4-12)	CC	MK	K	L&GD, L	T-OBT,VV-Viva	F&S	III	-	LH
CO1	Enlist the Composition of Basti (Cha.Si.10/14-16)Discuss the Types of Basti (Cha.Si.10/17-45)	CK	MK	K	L&GD, BL,L	VV-Viva,T-OBT,COM	F&S	III	-	LH
CO1	Summarize of the Chapter.	CC	NK	K	SDL	VV-Viva,T-OBT	F&S	III	-	LH

Topic 48 Cha.Si.11.Phalamatra Siddhi (LH :1 NLHT: 0 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1	Describe the Therapeutic action of Basti (Cha.Si.1/15-18)	CK	MK	K	L&PPT ,L	VV-Viva,T-OBT	F&S	III	-	LH
CO1, CO2	Describe the Concept of Sadatura and its management (Cha.Si.11/27-36)	CK	MK	K	L,L&GD,L&PPT	VV-Viva,T-OBT	F&S	III	-	LH
CO1	Summerize the Chapter based on sutra (Cha Si11/37)	CC	NK	K	SDL	VV-Viva,T-OBT	F&S	III	-	LH

Topic 49 Cha.Si.12.Uttara Basti Siddhi (LH :1 NLHT: 0 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO2	Describe significance of Rasasamsarjana Krama (Cha. Si.12/3-9)	CC	MK	K	L&PPT ,L,L&GD	VV-Viva,T-CS	F&S	III	-	LH
CO1, CO2, CO5	Describe the Ashta Mahadoshakara Bhava, their effect on Arogya and its Chikitsa (Cha.Si.12/10-15)	CK	MK	K	L&PPT ,L&GD, L	VV-Viva,T-OBT	F&S	III	-	LH
CO1, CO2	Describe the importance Yapana Basti 12/(16/1), and yogya ayogya for yapana basti and its prayojana (Cha. Si.12/20-23),	CC	MK	K	L,L&GD,L&PPT	T-OBT,VV-Viva	F&S	III	-	LH
CO5	Describe the Upadrava of Yapana Basti and their Chikitsa. (Cha. Si. 12/29-32)	CC	MK	K	L,L&PPT ,L&GD	T-OBT,VV-Viva	F&S	III	-	LH
CO1	Summarize the Chapter (Cha .Si.12/52-54)	CC	NK	K	SDL	T-OBT	F&S	III	-	LH

Topic 50 Term 3 Non Lecture theory Activities (LH :0 NLHT: 33 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO1	Apply Fundamental Principle of Samhita in diagnosis, interpretation, treatment planning, selection of formulations and appropriate dosage form, Kaala, Anupan etc.	CAP	MK	KH	L&GD, TBL	RK,VV-Viva,INT	F	III	-	NLHT50.1
CO1, CO2	Appraise Sambhasha on different topics of Samhita.	AFT-VAL	MK	SH	D	P-VIVA	F&S	III	-	NLHT50.2
CO1	Conduct Cross sectional study of Samhita	CAP	MK	KH	TBL,L &GD	RK,INT	F	III	-	NLHT50.3
CO1	Compare and analyse Charaka Samhita and Sushruta Samhita	CC	DK	KH	L&PPT ,L&GD	Log book,COM	F	III	-	NLHT50.4
CO2, CO3, CO6	Perform Samhita based analysis of Diseases.	CAP	MK	KH	D-BED	RK,VV-Viva,CBA	F&S	III	-	NLHT50.5
CO7	Review and summarize Published Articles on different aspects, topics of Samhita.	CAP	MK	KH	TBL,L &GD	INT,RK	F	III	-	NLHT50.6
CO1, CO2	Illustrate the Concept mapping of Samprapti and Chikitsa	CAP	MK	K	D	P-VIVA	F	III	-	NLHT50.7
CO1	Comparative Analysis of Chikitsa Siddhanta of Charaka Samhita and Sushruta Samhita	CC	MK	K	D	P-VIVA	F&S	III	-	NLHT50.8
CO7	Integrate Chikitsa concepts of Samhita with contemporary medical science	CAP	MK	KH	TBL,L &GD	RK,INT	F	III	-	NLHT50.9
CO1	Evaluate and describe Samhita with the help of Tantrayukti	CC	MK	KH	SDL	VV-Viva,INT,RK	F	III	-	NLHT50.10

CO1, CO2	Perform interview of senior Vaidya.	CAP	MK	KH	TBL,L &GD	INT,RK	F	III	-	NLHT50.1 1
CO1	Interpret and decode Samhitas with commentary.	CC	NK	KH	L&GD, SDL,REC,TBL	RK,VV-Viva,CBA	F&S	III	-	NLHT50.1 2
CO1	Recite memorise and recall important Shloka	CC	MK	K	SDL	P-REC	F&S	III	-	NLHT50.1 3

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 50.1	Fundamental Principle of Samhita used in diagnosis, interpretation, treatment planning, selection of formulations and appropriate dosage form, Kaala, Anupan etc.	Refer NLHT 17.1
NLHT 50.2	Conducting Sambhasha on different topics of the Samhita	Refer NLHT17.2 **Third Term Suggested Topics (1 hour)** Basti as Ardha Chikitsa/ Mode of action of Vamana Karma/Virachana Karma/ Basti Karma/ Nasya Karma etc.
NLHT 50.3	Cross sectional study of Samhita	Refer NLHT17.3 **Third Term** Limitations of Panchakarma: Understanding Its Scope and Constraints/ Mithya Upachara Janya Vyadhi: Diseases Caused by Improper Treatment/ Mode of Action of Basti Karma: A Comprehensive Therapeutic Mechanism/ Basti Karma as Sarva Chikitsa or Ardha Chikitsa: The Ultimate Therapeutic Tool/ Mechanism and Therapeutic Action of Nasya Karma: An In-Depth Analysis etc.
NLHT 50.4	Comparative study of Charaka Samhita and	Refer NLHT17.4

	Sushruta Samhita	**Third Term (4 hours)** Cha. Si.4, Su.Chi.37 Cha. Si. 5 and 7, Su. Chi. 35-36 Cha. Chi. 6, Su.Chi. 33-34 Cha Si.9/88-118 and Su. Chi. 40/20-57
NLHT 50.5	Samhita Based Analysis of Diseases	Refer NLHT 17.5 **Third Term (4 Hours)** Case of Vaman Karma, Virechan Karma, Niruha Basti Karma, Anuvasana Basti Karma, Nasya, Uttara Basti Karma etc.
NLHT 50.6	Review of Published Articles from Samhita	Refer NLHT 17.6 **Third Term (2 hours)** Madanaphala, Trivritta, Vamana Karma, Virechana Karma, Basti Karma, Nasya Karma etc.
NLHT 50.7	Concept mapping of Samprapti and Chikitsa	Refer NLHT 17.7 **Third Term (2 hours)** Vamana Karma in Shwasa, Nityavirechana in Udara, Basti Chikitsa in Vatarakta, Nasya Karma in Ardita
NLHT 50.8	Comparative Analysis of Chikitsa Siddhanta of Charaka Samhita and Sushruta Samhita	Refer NLHT 17.8 **Third Term (2 hours)** Chikitsa Siddhant of Sneha Basti Vyapada from Charaka Samhita and Sushruta Samhita, Chikitsa Siddhant of Niruha Basti Vyapada from Charaka Samhita and Sushruta Samhita
NLHT 50.9	Integrative activities - Compare Chikitsa concepts of Samhita with contemporary medical science	Refer NLHT 17.9 **Third Term (2 hours)**

		Concept of Basti Karma as per Ayurveda and Modern medicine, Concept of Nasya Karma as per Ayurveda and Modern medicine etc.
NLHT 50.10	Evaluation by Tantrayukti	Refer NLHT 17.10 **Third Term (2 hours)** Ch.Si.1/11-12 Cha. Si. 3/6-11, 26-30 Ch.Si.9/9-10 Ch. Si. 12/27-30
NLHT 50.11	Interview of senior Ayurveda Vaidya	Refer NLHT17.11
NLHT 50.12	Exploring Vyakhya	Refer NLHT 17.12 **Third Term (4 hours)** Cha. Si. 1/38-40 Cha. Si. 3/30-35, 69-71 Cha. Si.4/41-56 Cha. Si.7/7-29 Cha. Si 12/6-8, 41-44
NLHT 50.13	Recite, Memorise and recall Shlokas	Refer NLHT 17.13 **Third Term** Cha. Ka. 1/ 4, 27,29 Cha. Ka. 2/ 3, Cha. Ka. 3/3,4, Cha ka 4/3,4 Cha. Ka. 5/4, Cha ka 6/3-4 Cha. Ka.7/4-6 Cha. Ka. 8/3, cha ka 9/3, cha ka 11/3 Cha Ka 12/3, 48, 62, 81,82 Cha. Si. 1/ 7, 11, 12, 13-14, 15-19, 38-39, 41-43, 44-46

		Cha. Si. 4/25, 52-54 Cha. Si. 5/8 Cha. Si. 6/15-16, 29-30 Cha. Si. 7/5-6 Cha. Si 9/9-10, 88 Cha. Si. 10/ 4-5 Cha. Si. 11/ 27-28, 31 Cha. Si. 12/ 6-7, 9, 11-12, 21-22,33,36-37, 51

Table 4 : NLHT Activity

(*Refer table 3 of similar activity number)

Activity No*	CO No	Term	Activity details
17.1	CO1	1	Fundamental Principle of Samhita used in diagnosis, interpretation, treatment planning, selection of formulations and appropriate dosage form, Kaala, Anupan etc.
17.2	CO1,CO2	1	Conducting Sambhasha on different topics of the Samhita
17.3	CO1	1	Comparative study of Charaka Samhita and Sushruta Samhita
17.4	CO1	1	Cross sectional study of Samhita
17.5	CO2,CO3,CO6	1	Samhita Based Analysis of Diseases
17.6	CO7	1	Review of Published Articles from Samhita
17.7	CO1,CO2	1	Concept mapping of Samprapti and Chikitsa
17.8	CO1	1	Comparative Analysis of Chikitsa Siddhanta of Charaka Samhita and Sushruta Samhita
17.9	CO7	1	Integrative activities - Compare Chikitsa concepts of Samhita with contemporary medical science
17.10	CO1	1	Evaluation by Tantrayukti
17.11	CO1,CO2	1	Interview of senior Ayurveda Vaidya
17.12	CO1	1	Exploring Vyakhya
17.13	CO1	1	Recite, Memorise and recall Shlokas
17.14	CO1	1	Jastification of Cronological arrangement of Samhita
37.1	CO1	2	Fundamental Principle of Samhita used in diagnosis, interpretation, treatment planning, selection of formulations and appropriate dosage form, Kaala, Anupan etc.

37.2	CO1,CO2	2	Conducting Sambhasha on different topics of the Samhita
37.3	CO1	2	Cross sectional study of Samhita
37.4	CO1	2	Comparative study of Charaka Samhita and Sushruta Samhita
37.5	CO2,CO3,CO6	2	Samhita Based Analysis of Diseases
37.6	CO7	2	Review of Published Articles from Samhita
37.7	CO1,CO2	2	Concept mapping of Samprapti and Chikitsa
37.8	CO1	2	Comparative Analysis of Chikitsa Siddhanta of Charaka Samhita and Sushruta Samhita
37.9	CO7	2	Integrative activities - Compare Chikitsa concepts of Samhita with contemporary medical science
37.10	CO1	2	Evaluation by Tantrayukti
37.11	CO1,CO2	2	Interview of senior Ayurveda Vaidya
37.12	CO1	2	Exploring Vyakhya
37.13	CO1	2	Recite, Memorise and recall Shlokas
50.1	CO1	3	Fundamental Principle of Samhita used in diagnosis, interpretation, treatment planning, selection of formulations and appropriate dosage form, Kaala, Anupan etc.
50.2	CO1,CO2	3	Conducting Sambhasha on different topics of the Samhita
50.3	CO1	3	Cross sectional study of Samhita
50.4	CO1	3	Comparative study of Charaka Samhita and Sushruta Samhita
50.5	CO2,CO3,CO6	3	Samhita Based Analysis of Diseases
50.6	CO7	3	Review of Published Articles from Samhita

50.7	CO1,CO2	3	Concept mapping of Samprapti and Chikitsa
50.8	CO1	3	Comparative Analysis of Chikitsa Siddhanta of Charaka Samhita and Sushruta Samhita
50.9	CO7	3	Integrative activities - Compare Chikitsa concepts of Samhita with contemporary medical science
50.10	CO1	3	Evaluation by Tantrayukti
50.11	CO1,CO2	3	Interview of senior Ayurveda Vaidya
50.12	CO1	3	Exploring Vyakhya
50.13	CO1	3	Recite, Memorise and recall Shlokas

Destribution of NLHT Hours					
Sl. No.	**Topic**	**1st Term**	**2nd Term**	**3rd Term**	**Total**
1	Application of fundamental Principle of Samhita	6	6	6	18
2	Sambhasha	1	1	1	3
3	Cross sectional study of Samhita	1	1	1	3
4	Comparative study of Charaka Samhita and Sushruta Samhita	4	4	4	12
5	Samhita based analysis of Diseases	4	4	4	12
6	Review of Published Articles from Samhita	2	2	2	6
7	Concept mapping of Samprapti and Chikitsa	2	2	2	6
8	Comparative study of Chikitsa Siddhanta	2	2	2	6
9	Integrative study of Chikitsa concepts of Samhita	2	2	2	6
10	Evaluation by Tantrayukti	2	2	2	6
11	Interview of senior Ayurveda Vaidya	1	1	1	3
12	Chakrapani Vyakhya	4	4	4	12
13	Recitation and memorization of important Shloka	2	2	2	6
14	Justification of Adhyaya	1	0	0	1
					100

Table 5 : List of Practicals

Not Applicable

Table 6 : Assessment Summary: Assessment is subdivided in A to H points

6 A : Number of Papers and Marks Distribution

Subject Code	Papers	Theory	Practical/Clinical Assessment (100)					Grand Total
			Practical	Viva	Elective	IA	Sub Total	
AyUG-SA3	1	100	-	75	10 (Set-TC)	15	100	200

6 B : Scheme of Assessment (Formative and Summative)

PROFESSIONAL COURSE	FORMATIVE ASSESSMENT			SUMMATIVE ASSESSMENT
	First Term (1-6 Months)	Second Term (7-12 Months)	Third Term (13-18 Months)	
Third	3 PA & First TT	3 PA & Second TT	3 PA	**UE****

PA: Periodical Assessment; **TT:** Term Test; **UE:** University Examinations; **NA:** Not Applicable.
**University Examination shall be on entire syllabus

6 C : Calculation Method for Internal assessment Marks

TERM	PERIODICAL ASSESSMENT*					TERM TEST**	TERM ASSESSMENT	
	A	B	C	D	E	F	G	H
	1 (15 Marks)	2 (15 Marks)	3 (15 Marks)	Average (A+B+C/3)	Converted to 15 Marks (D/15*15)	Term Test (Marks converted to 15) (15 Marks)	Sub Total _/30 Marks	Term Assessment (…./15)
FIRST							E+F	(E+F)/2
SECOND							E+F	(E+F)/2
THIRD						NIL		E
Final IA	Average of Three Term Assessment Marks as Shown in 'H' Column.							
	Maximum Marks in Parentheses *Select an Evaluation Method which is appropriate for the objectives of Topics from the Table 6 D for Periodic assessment. Conduct 15 marks assessment and enter marks in A, B, and C. ** Conduct Theory (100 Marks) (MCQ(20*1 Marks), SAQ(8*5), LAQ(4*10)) and Practical (100 Marks) Then convert total to 15 marks.							

6 D : Evaluation Methods for Periodical Assessment

S. No.	Evaluation Methods
1.	Practical / Clinical Performance
2.	Viva Voce, MCQs, MEQ (Modified Essay Questions/Structured Questions)
3.	Open Book Test (Problem Based)
4.	Summary Writing (Research Papers/ Samhitas)
5.	Class Presentations; Work Book Maintenance
6.	Problem Based Assignment
7.	Objective Structured Clinical Examination (OSCE), Objective Structured Practical Examination (OPSE), Mini Clinical Evaluation Exercise (Mini-CEX), Direct Observation of Procedures (DOP), Case Based Discussion (CBD)
8.	Extra-curricular Activities, (Social Work, Public Awareness, Surveillance Activities, Sports or Other Activities which may be decided by the department).
9.	Small Project
10.	Activities Indicated in Table 3 - Column G3 as per Indicated I, II or III term in column I3.

Topics for Periodic Assessments

	Paper 1
PA 1	Topic 1-4 or Topic 17
PA 2	Topic 5-8 or Topic 17
PA 3	Topic 9-12 or Topic 17
Term Test 1	Entire Syllabus of Term 1
PA 4	Topic 18-22 or Topic 37
PA 5	Topic 23-26 or Topic 37
PA 6	Topic 27-32 or Topic 37
Term Test 2	Entire Syllabus of Term 2
PA 7	Topic 38-41 or Topic 50
PA 8	Topic 42-45 or Topic 50
PA 9	Topic 46-49 or Topic 50

6 E : Question Paper Pattern

III PROFESSIONAL BAMS EXAMINATIONS
AyUG-SA3
PAPER-I
Time: 3 Hours Maximum Marks: 100
INSTRUCTIONS: All questions compulsory

		Number of Questions	**Marks per question**	**Total Marks**
Q 1	MULTIPLE CHOICE QUESTIONS (MCQ)	20	1	20
Q 2	SHORT ANSWER QUESTIONS (SAQ)	8	5	40
Q 3	LONG ANSWER QUESTIONS (LAQ)	4	10	40
				100

6 F : Distribution of theory examination

Paper 1 (Samhita Adhyayan - 3)					
Sr. No	**A List of Topics**	**B Marks**	**MCQ**	**SAQ**	**LAQ**
1	**Cha.Chi.1.Rasayana Adhyaya**	40	Yes	Yes	Yes
2	**Cha.Chi. 2.Vajikarana Adhyaya**		Yes	Yes	No
3	**Cha. Chi .3. Jwara Chikitsitam**		Yes	Yes	Yes
4	**Cha. Chi.4.Raktapitta Chikitsitam**		Yes	Yes	No
5	**Cha. Chi .5. Gulma Chikitsitam**		Yes	Yes	No
6	**Cha.Chi. 6. Prameha Chikitsitam**		Yes	Yes	Yes
7	**Cha. Chi.7.Kushtha Chikitsitam**		Yes	Yes	Yes
8	**Cha.Chi 8.Rajayakshma Chikitsitam**		Yes	Yes	No
9	**Cha. Chi.9.Unmada Chikitsitam**		Yes	Yes	Yes
10	**Cha.Chi.10.Apasmara Chikitsitam**		Yes	Yes	Yes
11	**Cha. Chi.11.Kshataksheena Chikitsitam**		Yes	Yes	No
12	**Cha. Chi. 12.Shwayathu Chikitsitam**		Yes	Yes	No
13	**Cha. Chi.13.Udara Chikitsitam**		Yes	Yes	Yes
14	**Cha. Chi.14.Arsha Chikitsitam**		Yes	Yes	No
15	**Cha. Chi.15.Grahani dosha Chikitsitam**		Yes	Yes	Yes
16	**Cha. Chi.16.Panduroga Chikitsitam**		Yes	Yes	Yes
17	**Term 1 Non Lecture theory Activities**				
18	**Cha Chi.17.Hikka Shwasa Chikitsitam**	30	Yes	Yes	Yes
19	**Cha. Chi.18.Kasa Chikitsitam**		Yes	Yes	Yes
20	**Cha. Chi.19.Atisara Chikitsitam**		Yes	Yes	No
21	**Cha. Chi.20.Chhardi Chikitsitam**		Yes	Yes	No
22	**Cha. Chi.21.Visarpa Chikitsitam**		Yes	Yes	No
23	**Cha. Chi.22.Trishna Chikitsitam**		Yes	Yes	No
24	**Cha. Chi.23.Visha Chikitsitam**		Yes	Yes	No
25	**Cha.Chi.24.Madatyaya Chikitsitam**		Yes	Yes	No
26	**Cha.Chi.25.Dwivraniya Chikitsitam**		Yes	Yes	No
27	**Cha. Chi.26. Trimarmiya Chikitsitam**		Yes	Yes	No

28	**Cha.Chi.27.Urusthambha Chikitsitam**		Yes	Yes	No
29	**Cha.Chi.28.Vatavyadhi Chikitsitam**		Yes	Yes	Yes
30	**Cha.Chi.29.Vatashonita Chikitsitam**		Yes	Yes	Yes
31	**Cha.Chi.30.Yonivyapad Chiktsitam**		Yes	Yes	No
32	**Cha. Ka.1Madanakalpam**	10	Yes	Yes	No
33	**Cha.Ka.2 to 6**		Yes	Yes	No
34	**Cha.Ka.7.Shyamatrivrutta Kalpam**		Yes	Yes	No
35	**Cha.Ka.8. to 11**		Yes	No	No
36	**Cha.Chi.12.Dantidravanti Kalpam**		Yes	Yes	No
37	**Term 2 Non Lecture theory Activities**				
38	**Cha. Si.1.Kalpana Siddhi**	20	Yes	Yes	Yes
39	**Cha.Si.2.Panchakarmiya Siddhi**		Yes	Yes	No
40	**Cha.Si.3.Bastisutriyam Siddhi**		Yes	Yes	No
41	**Cha. Si.4.Snehavyapat Siddhi**		Yes	Yes	No
42	**Cha.Si. 5.Netrabastivyapat Siddhi**		Yes	Yes	Yes
43	**Cha.Si.6.Vamana Virechana Vyapat Siddhi**		Yes	Yes	Yes
44	**Cha. Si. 7.Bastivyapat Siddhi**		Yes	Yes	Yes
45	**Cha.Si.8.Prasrita Yogiyam Siddhi**		Yes	Yes	No
46	**Cha.Si.9.Trimarmiya Siddhi**		Yes	Yes	No
47	**Cha. Si. 10.Basti Siddhi**		Yes	Yes	No
48	**Cha.Si.11.Phalamatra Siddhi**		Yes	No	No
49	**Cha.Si.12.Uttara Basti Siddhi**		Yes	Yes	Yes
50	**Term 3 Non Lecture theory Activities**				
Total Marks		**100**			

6 G : Instructions for UG Paper Setting & Blue print

1. All questions shall be compulsory.
2. Questions shall be drawn based on Table 6F, which provides the topic name, types of questions (MCQ(Multiple Choice Question), SAQ(Short Answer Question), LAQ(Long Answer Question)).
3. The marks assigned in Table 6F for each topic/group of topics shall be considered as the maximum allowable marks for that topic/group of topics.
4. Ensure that the total marks allocated per topic/group of topics do not exceed the limits specified in Table 6F.
5. Refer to Table 6F before setting the questions. Questions shall be framed only from topics where the type is marked as “YES”, and avoided if marked as “NO”.
6. Each 100-mark question paper shall contain:
   - 20 MCQs
   - 8 SAQs
   - 4 LAQs

7. MCQs:
   - Majority shall be drawn from the Must to Know part of the syllabus.
   - Questions from the Desirable to Know part of syllabus shall not exceed 3.
   - Questions from the Nice to Know part of syllabus shall not exceed 2.

8. SAQs:
   - Majority shall be drawn from the Must to Know part of the syllabus.
   - Questions from the Desirable to Know part of syllabus shall not exceed 1.
   - No questions shall be drawn from the Nice to Know part of syllabus.
   - SAQs shall assess understanding, application, and analysis, rather than simple recall.

9. LAQs:
   - All LAQs shall be drawn exclusively from the Must to Know part of the syllabus.
   - No questions shall be taken from the Desirable to Know or Nice to Know part of the syllabus.
   - Number of LAQs should not exceed one per topic unless maximum marks exceed 20 for the topic.

10. Long Answer Questions shall be structured to assess higher cognitive abilities, such as application, analysis, and synthesis.
11. Follow the guidelines in User Manual III for framing MCQs, SAQs, and LAQs.

6 H : Distribution of Practical Exam

S.No	Heads	Marks
1	Recitation of Shloka and Shloka Record Book	10
2	Non Lecture Activity Journal/ File	10
3	Assessment of Communication Skills	05
4	Clinical Case Taking	10
5	Viva-Voce	40
6	Internal Assessment	15
7	Electives Set TC	10
Total Marks		**100**

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Abbreviations

Domain		T L Method		Level		Assessment		Integration	
CK	Cognitive/Knowledge	L	Lecture	K	Know	T-CS	Theory case study	V-RS	V RS
CC	Cognitive/Comprehension	L&PPT	Lecture with PowerPoint presentation	KH	Knows how	T-OBT	Theory open book test	V-KS	V KS
CAP	Cognitive/Application	L&GD	Lecture & Group Discussion	SH	Shows how	P-VIVA	Practical Viva	H-KC	H KC
CAN	Cognitive/Analysis	L_VC	Lecture with Video clips	D	Does	P-REC	Practical Recitation	H-SH	H SH
CS	Cognitive/Synthesis	REC	Recitation			P-EXAM	Practical exam	H-PK	H PK
CE	Cognitive/Evaluation	SY	Symposium			PRN	Presentation	H-SHL	H SHL
PSY-SET	Psychomotor/Set	TUT	Tutorial			P-PRF	Practical Performance	H-SP	H SP
PSY-GUD	Psychomotor/Guided response	DIS	Discussions			P-SUR	Practical Survey	H-KB	H-KB
PSY-MEC	Psychomotor/Mechanism	BS	Brainstorming			P-EN	Practical enact	H-Samhita	H-Samhita
PSY-ADT	Psychomotor Adaptation	IBL	Inquiry-Based Learning			P-RP	Practical Role play	V-DG	V DG
PSY-ORG	Psychomotor/Origination	PBL	Problem-Based Learning			P-MOD	Practical Model	V-RN	V RN
AFT-REC	Affective/ Receiving	CBL	Case-Based Learning			P-POS	Practical Poster	V-RS	V RS
AFT-RES	Affective/Responding	PrBL	Project-Based Learning			P-CASE	Practical Case taking	V-AT	V AT
AFT-VAL	Affective/Valuing	TBL	Team-Based Learning			P-ID	Practical identification	V-SW	V SW
AFT-SET	Affective/Organization	TPW	Team Project Work			P-PS	Practical Problem solving		
AFT-CHR	Affective/ characterization	FC	Flipped Classroom			QZ	Quiz		
PSY-PER	Psychomotor/perception	BL	Blended Learning			PUZ	Puzzles		
PSY-COR	Psychomotor/ Complex Overt Response	EDU	Edutainment			CL-PR	Class Presentation		
		ML	Mobile Learning			DEB	Debate		
		ECE	Early Clinical Exposure			WP	Word puzzle		
		SIM	Simulation			O-QZ	Online quiz		
		RP	Role Plays			O-GAME	Online game-based assessment		
		SDL	Self-directed learning			M-MOD	Making of Model		
		PSM	Problem-Solving Method			M-CHT	Making of Charts		
		KL	Kinaesthetic Learning			M-POS	Making of Posters		

		W	Workshops			C-INT	Conducting interview		
		GBL	Game-Based Learning			INT	Interactions		
		LS	Library Session			CR-RED	Critical reading papers		
		PL	Peer Learning			CR-W	Creativity Writing		
		RLE	Real-Life Experience			C-VC	Clinical video cases		
		PER	Presentations			SP	Simulated patients		
		D-M	Demonstration on Model			PM	Patient management problems		
		PT	Practical			CHK	Checklists		
		X-Ray	X-ray Identification			Mini-CEX	Mini-CEX		
		CD	Case Diagnosis			DOPS	DOPS		
		LRI	Lab Report Interpretation			CWS	CWS		
		DA	Drug Analysis			RS	Rating scales		
		D	Demonstration			RK	Record keeping		
		D-BED	Demonstration Bedside			COM	Compilations		
		DL	Demonstration Lab			Portfolios	Portfolios		
		DG	Demonstration Garden			Log book	Log book		
		FV	Field Visit			TR	Trainers report		
						SA	Self-assessment		
						PA	Peer assessment		
						360D	360-degree evaluation		
						PP-Practical	Practical		
						VV-Viva	Viva		
						DOAP	Demonstration Observation Assistance Performance		
						SBA	Scenario Based Assessment		
						CBA	Case based Assessment		
						S-LAQ	Structured LAQ		
						OSCE	Observed Structured Clinical Examination		
						OSPE	Observed Structured Practical Examination		
						DOPS	Direct observation of procedural skills		

Name of College with LOGO

AYURVEDACHARYA (B.A.M.S.)

THIRD PROFESSIONAL B.A.M.S.

<< Subject Name >>

(SUBJECT CODE : AyUG-)

JOURNAL /ACTIVITY BOOK

Name of the student :

Institutional Roll No. :

Examination Reg. No. :

Academic Year :

(Name of the College)

(Affiliated to –National Commission for Indian System of Medicines, New Delhi &

Name of the University)

Name of the department

Batch- _____

Certificate

This is to certify that, Mr. / Ms. _____, Enrolment Number-_____ has satisfactorily completed the Practicals in (Subject Name) prescribed by the (Name of University) as a part of the Third Professional B.A.M.S. Course.

Examination Seat No.: _____

Sign. of Teacher Sign. of H.O.D.

Date of Examination- _____

Sign. Of Internal Examiner-_____

Sign. Of External Examiner-_____

JOURNAL /ACTIVITY BOOK

<< Subject name >>

(SUBJECT CODE : AyUG -)

Journal Cum Activity Book

DEPARTMENT OF

<< Name of Department >>

Name of the College

INDEX

Sr no	Topic	Date	Page no
1			
2			
3			
4			

Destribution of NLHT Hours					
Sl. No.	**Topic**	**1st Term**	**2nd Term**	**3rd Term**	**Total**
1	Application of fundamental Principle of Samhita	6	6	6	18
2	Sambhasha	1	1	1	3
3	Cross sectional study of Samhita	1	1	1	3
4	Comparative study of Charaka Samhita and Sushruta Samhita	4	4	4	12
5	Samhita based analysis of Diseases	4	4	4	12
6	Review of Published Articles from Samhita	2	2	2	6
7	Concept mapping of Samprapti and Chikitsa	2	2	2	6
8	Comparative study of Chikitsa Siddhanta	2	2	2	6
9	Integrative study of Chikitsa concepts of Samhita	2	2	2	6
10	Evaluation by Tantrayukti	2	2	2	6
11	Interview of senior Ayurveda Vaidya	1	1	1	3
12	Chakrapani Vyakhya	4	4	4	12
13	Recitation and memorization of important Shloka	2	2	2	6
14	Justification of Adhyaya	1	0	0	1
					100

1. APPLICATION OF FUNDAMENTAL PRINCIPLE OF SAMHITA

Aim: To assess significance of Fundamental Principles related to fundamental principles of samhita in diagnosis, interpretation, treatment planning, formulation selection, dosage form, kaala, and anupana

Name				**Sl. No.**		
Age				**UHID**		
Sex	M / F/ Tr			**OPD/IP No.**		
Contact No.				**Date**		
Address						
Religious affiliation	Hindu	Islam	Christianity	Sikh	Others	
Socio-economic Status	Poor	Lower Middle	Middle	Upper Middle	Rich	
Educational Status	Uneducated	Primary	Middle Class	Higher Secondary	UG	PG and above
Name of Physician						

Main Complaints and Duration:

History of Present illness:

Family History:

Drug History:

Nidana:

Hetu	**Analysis of Guna**	**Effect on Sharirika Dosha**	**Effect on Manasika Dosha**
Aharaja			
Viharaja			
Manasika			
Agantuja			
Mithya Upachara Janya/Vaidya Janita			

Purvarupa:

Purvaroopa	Dosha	Dushya	Adhishtana

Rupa:

Rupa	Dosha	Dushya	Adhishtana

Upashaya:

Factors of Upashaya	Samanya Vishesh Siddhanta

Samprapti:

Details of Key Siddhantas Applied in the Samprapti such as – Samanya-Vishesha Siddhanta, Karya-Karana Siddhanta and Guna Siddhanta

Chikitsa Sutra:

Key Chikitsa Siddhanta Used: Such as – Samanya-Vishesha Siddhanta, Karya-Karana Siddhanta and Guna Siddhanta

Treatment Modalities selected:

Treatment Modalities	**Details**	**Reason**
Daivavyapashraya Chikitsa		
Yuktivyapashraya Chikitsa		
Satvavajaya Chikitsa		

Shad Upakramas Selcted

Upakrama	**Details**	**Reason**
Brimhana		
Langhana		
Swedana		
Stambhana		
Snehan		
Rukshan		

Assessment of Vyadhi and Atura Bala

Vyadhi Bala	Pravara	Madhyam	Avara
Atura Bala	Pravara	Madhyam	Avara

Kalpa-Kalpana Selected:

Kalpana	**Name of the Aushadha Yoga**
Swarasa	
Kalka/ Churna Kalpana	
Kwatha	
Hima	
Phanta	
Sneha Kalpana	
Asava/Arishta Kalpana	
Vati Kalpana	
Ksheerapaka	
Arka Kalpana	
Avaleha Kalpana	
Other	

Aushadha Kalpana, Matra, Sevan Kaala, Anupana, Duration:

Aushadha Kalpana	Matra	Sevana kaala	Anupana	Duration

Clinical Correlation and Integration of Siddhantas:

Siddhanta used	Possible correlation with contemporary science
Samanya-Vishesha	
Guna Siddhanta	
Modalities of treatment	
Selected Aushadha Kalpana	

Case Analysis and Outcome

Initial Response (within 2 weeks):

Response after 2 Weeks:

2. SAMBHASHA VIDHI

Guidelines:

Aim: To conduct Sambhasha (scholarly discussion) on relevant topics from Charaka Samhita, enabling critical analysis, textual understanding, and clinical application.

Following are the guidelines for Sambhasha Vidhi

Number of Groups: Two

Names of Groups: 1. Sthapana 2. Pratishthapana

Number of participants in each group: 5 + 5 / whole class may be divided into two groups.

Number of rounds: Two.

Prathama Vartula Uddeshata (first round briefing) by using Pancahavayava Vakya.

Dwitiya Vartula Nirdeshata (Second round of elaboration) by taking help of classmates, seniors, PGs, Faculties, consultants' researchers etc.

Activity Steps:

1. Select the debatable Topic – Choose a relevant topic (e.g.,Basti is Ardha Chikitsa, Tamake tu Virechanam etc)
   Sthapana group debate for the support of the topic, Pratishtapana debate against the topic.
2. **Study Primary Texts** – Refer to Charaka Samhita, Chakrapani Teeka, and related commentaries, Sushruta Samhita, Ashtanaga Hrudaya, Ashtanga Sangraha, Contemporary texts.
3. **Review Secondary Literature** – Gather insights from research papers, case studies, and clinical experiences.
4. **Define Key Discussion Areas** – Prepare thought-provoking questions to guide the dialogue.
5. **Set Discussion Rules** – Structure the rounds, time limits for first and second round, and participation format as mentioned above
6. **Invite Participants** – Open participation for students of SA-III. internees PGs and PhDs Participation may be taken if required.
7. **Introduce the Topic** – Provide a brief overview, contextual background, and clinical relevance.
8. **Facilitate Knowledge Sharing** – Encourage participants to discuss textual interpretations, evidence, and clinical perspectives.

9. **Explore Practical Applications** – Discuss the real-world implications and applicability of concepts.
10. **Summarize and Document Insights** – Conclude with key takeaways and document references from texts and research.

Example: You may refer KLE SAMVADA you tube links for better understanding of Sambhasha Vidhi.

SAMBHASHA VIDHI

Term: I/II/III **Date and Time:**

Sr. No.	Contents	
1	**Topic for *Sambhasha Vidhi***	
2	**Reference**	
3	**Key Discussion Areas**	
4	**Names of Participants – Team Sthapana**	1. 2. 3. 4. 5.
5	**Names of Participants – Team Pratishtapana**	1. 2. 3. 4. 5.
6	**Points put forward by Team Sthapana in first round through Panchavayava vakya**	1. Prtijna : 2. Hetu : 3. Udaharana : 4. Upanaya : 5. Nigamana :
7	**Points put forward by Team Pratishtapana in first round through Panchavayava Vakya**	1. Pratijna : 2. Hetu : 3. Udaharana : 4. Uapanaya : 5. Nigaman :
8	**Detailed second round by Sthapana with argument and counter arguments by cross referring texts and research articles**	Sthapana's discussion:

9	**Detailed second round by Pratisthapana with argument and counter arguments by cross referring texts and research articles**	Pratishapana:

10	**Perspectives shared by the other if any**	• • •
11	**Nigrahasthana Decision given by the teacher/Expert**	
12	**key takeaways by the teacher with its practical applications**	

Geo tagged photos

3. CROSS SECTIONAL STUDY OF SAMHITA.

1. Title of the Study:

2. Name of Students participated from each group.

Group I.

Group II

Group III.

3. Theme Allocation:

4. Topic Chosen:

5.Literature Review

a. Introduction about topic:

b: Review/ Insights from Chikitsasthana (disease Management):

c. Review/Insights from Kalpa Sthana (Pharmacological Preparations):

d. Procedural insights from Siddhi Sthana (Panchakarma Procedures):

f. Collection of Information from published research articles/case reports/videos/books:

6. Mode of Presentations: Charts/tables/case studies to demonstrate continuity and progression across Sthanas.

Geotag photo-

7. Discussion:

a. Discussion on Structured knowledge flow from disease management to formulation and procedural expertise.

b. Reflection on Clinical application.

8. Conclusion:

9. Areas Require Further Explorations

10. References

4. COMPARATIVE STUDY OF CHARAKA SAMHITA AND SUSHRUTA SAMHITA

- Title of Topic:
- Name of Group: Date:

Siddhanta from *Charaka Samhita*	
Reference	
Similarities with Siddhanta from Sushruta Samhita	
Reference	
Dissimilarities with Siddhanta from Sushruta Samhita	
Reference	
Interpretation	
Visual Concept Map	

5. SAMHITA BASED ANALYSIS OF DISEASES

Name				**Sl. No.**		
Age				**UHID**		
Sex	M / F/ Tr			**OPD No.**		
Contact No.				**Date**		
Address						
Religious affiliation.	Hindu	Islam	Christianity	Sikh	Others	
Socio-economic Status	Poor	Lower Middle	Middle	Upper Middle	Rich	
Educational Status	Uneducated	Primary	Middle Class	Higher Secondary	UG	PG and above
Name of Physician						

- Main Complaints and Duration:
- History of Present illness:
- Family History:
- Drug History:
- **Rogi Pariksha:** Dashavidha Pariksha:

Sl.No.	Pariksha Bhavas	
1.	Prakriti	
2.	Vikriti	
3.	Saara	
4.	Samhanana	
5.	Pramana	
6.	Satmya	
7.	Satva	
8.	Ahara Shakti I. Jarana shakti	

	II. Abhyavaharana shakti	
9.	Vyayama Shakti	
10.	Vaya	

- **Agni Pareeksha:** Sama / Vishama / Manda / Teekshna
- **Kosta Pareeksha:** Mridu / Madhyama / Krura

- **Hetu Jnana:** Asatmya Indriyartha Samyoga

Type of Yoga	Chakshurendriya	Shravanendriya	Ghranendriya	Rasanendriya	Sparshanendriya
Atiyoga					
Hinayoga					
Mithyayoga					

- Prajnaparadha

Dhi Vibhrama	Dhriti Vibhrama	Smriti Vibharama

- Parinama

Type of Yoga	Varsha	Sharada	Hemanta	Shishira	Vasanta	Grishma
Atiyoga						
Hina Yoga						
Mithya Yoga						

- Vegavarodha Janya Nidana

Sl.No.	Vegavarodha	Lakshana

- Purvaroopa:

- Rupa:
- Upashaya:

- **Samprapti Jnana:** Dosha Avastha:
-

Vata Vriddhi	Vata Kshaya	Pitta Vriddhi	Pitta Kshaya	Kapha Vriddhi	Kapha Kshaya

- Dosha Gati:

Urdhva	Adhah	Tiryak

- Rogamarga:

Shakhashraya	Madhyamargashrya	Koshtashraya

- Type of Prakopa:

Svatantra	Paratantra

- Sama-Nirama Avastha:

Dosha	Sama	Nirama
Vata		
Pitta		
Kapha		

- Dhatu Vishesha Ashraya:

Rasa	Rakta	Mamsa	Meda	Asthi	Majja	Shukra

- Srotasa Involved and Srotodushti Lakshana Seen:

Srotas	Rasa	Rakta	Mamsa	Meda	Asthi	Majja	Shukra
Lakshana							

- Sroto dusti prakara:
- Samprapti Chart:
- Vyadhi vinischya:
- Sadhyasdhyata:
- Chikitsa Siddhanta:
- Shodhan :
- Shaman :
- Pathya -Apathya Suggested :

6. REVIEW OF PUBLISHED ARTICLES RELATED TO SAMHITA

Name of Topic	
No. of Articles reviewed	
Article 1	
Title of Article	
Type of Article	
Name of Journal and details	
Summary of article (in 5 sentences)	
Article 2	
Title of Article	
Type of Article	
Name of Journal and details	
Summary of article (in 5 sentences)	

Article 3	
Title of Article	
Type of Article	
Name of Journal and details	
Summary of article (in 5 sentences)	
Article 4	
Title of Article	
Type of Article	
Name of Journal and details	
Summary of article (in 5 sentences)	
Article 5	

Title of Article	
Type of Article	
Name of Journal and details	
Summary of article (in 5 sentences)	
Analysis and Interpretation	
Key Insights from each article.	**1.** **2.** **3.** **4.** **5.**
Compare findings with Ayurvedic Classical text book.	
Identify trends/gap/ areas for further exploration.	
Presentation and Reflection	
Written report/ Presentation.	

7. CONCEPT MAPPING PERFORMA FOR SAMPRAPTI & CHIKITSA

Name of the diseases_ Date:

I. **Samprapti (Pathogenesis of Disease)**

1. Nidana (Causative Factors) – Identify & List Specific Causes

a. Aharaja (Dietary Causes): _____

b. Viharaja (Lifestyle Factors): _____

c. Manasika (Psychological Factors): _____

d. Agantuja (External/Infectious Causes): _____

e. Beeja Dosha (Genetic Factors): _____

2. Dosha-Dushya Participation

- Primary Doshas Involved: _____
- Dushya (Affected Tissues/Upadhatus): _____
- Srotas (Affected Body Channels): _____
- Agni
- Srotas-
- Srotodushti Prakara (Pathological Channel Disturbance – Check Relevant Boxes)

  ☐ Sanga (Obstruction) ☐ Atipravritti (Excess Flow)

  ☐ Sira Granthi (Nodul Formation) ☐ Vimarga Gamana (Misrouted Flow)

- Adhisthana-
- Rogamarga-

3. Disease Progression (Vyadhi Vikas – Six Stages)

i. . Sanchaya (Accumulation): _____
ii. Prakopa (Aggravation): _____
iii. Prasara (Spread): _____
iv. Sthana Samshraya (Localization): _____
v. Vyakti (Manifestation/Symptoms): _____
vi. Bheda (Complications/Chronicity): _____

4.Purvarupa

5. Rupa-

II. Chikitsa (Treatment Approach Based on Samprapti)

A. Chikitsa Siddhanta (Therapeutic Principles – Select Relevant Ones)

☐ Shamana (Pacification Therapy) ☐ Shodhana (Elimination Therapy)

☐ Agni Deepana & Amapachana (Digestive Fire Enhancement & Detox) ☐ Vyadhi Pratyanika Chikitsa (Disease-Specific Management)

B. Specific Treatment Approaches

1. Shodhana Chikitsa (Purification Therapy – If required):

☐ Vamana ☐ Virechana ☐ Basti ☐ Nasya ☐ Raktamokshana

2. Shamana Chikitsa (Palliative Therapy):

Herbal Formulations: _____

Local Applications (Lepa/Abhyanga): _____

Dietary Modifications (Pathya-Apathya): _____

Lifestyle Changes (Dinacharya, Ritucharya): _____

3. Rasayana & Vajikarana Therapy (If Applicable):

Medhya Rasayana (For Mental Strength): _____

Dhatu Poshaka Rasayana (For Tissue Nourishment): _____

4. Other Therapies (Daivavyapashraya , Yukti Vyapashraya, Sattvavajaya):

Daivavyapashraya (Spiritual Therapies – Mantras, Homa, etc.): _____

Yukti Vyapashraya (Rational Therapies – Herbs, Diet): _____

Sattvavajaya (Mind Therapy – Counselling, Meditation): _____

5. Concept Mapping (Attach a Diagram/Flowchart)

(Students should create a flowchart connecting disease pathogenesis to treatment strategies.)

8. Comparative Analysis of Chikitsa Sidhhant of Charaka Samhita and Sushruta Samhita

TOPIC NAME :

Date of activity : _____

Aspect	Charaka Samhita	Shushruta Samhita
Nidan		
Samprapti		
Lakshaan		
Chikitsa sutra		
Shodhan		
Shaman		
Agyra / Rasayan		
Shashtra karma		
Pathya ahara		
Treatment approach comparison		

Key difference		
Reasons for specific management		
Conclusion		

9. COMPARISON OF CHIKITSA CONCEPTS OF SAMHITA WITH CONTEMPORARY MEDICAL SCIENCE

Sr.No		

1.	Study the disease and principles of management from Charaka Samhita	
2.	Correlation with Modern science	
3.	Compare the aetiopathogenesis, symptomatology from Charaka Samhita view and Modern Science View	
	Ayurvedic Perspective (Charaka Samhita)	Contemporary Medical Science Science
a.		
b.		
c.		
d.		
f.		
4.	Analyse the treatment modalities	
5.	Explore integrative potential	
6.	Identity the strength and limitations of both a. Ayurvedic View b. Modern View	
7.	Other point	
8.	Conclusion	

10. EVALUATION OF TANTRAYUKTI FROM GIVEN CHAPTER OF CHARAKA SAMHITA

- **Name of Chapter:**

Shloka with reference (Adhyaya No. ---/ Verse No. ---)	
Name of Tantrayukti	
Justification of Tantrayuktis in Achieving Deeper Meaning and Logical Structure.	

Shloka with reference (Adhyaya No. ---/ Verse No. ---)	
Name of Tantrayukti	
Justification of Tantrayuktis in Achieving Deeper Meaning and Logical Structure.	

Shloka with reference (Adhyaya No. ---/ Verse No. ---)	
Name of Tantrayukti	
Justification of Tantrayuktis in Achieving Deeper Meaning and Logical Structure.	

Shloka with reference (Adhyaya No. ---/ Verse No. ---)	
Name of Tantrayukti	
Justification of Tantrayuktis in Achieving Deeper	

Meaning and Logical Structure.	

Shloka with reference (Adhyaya No. ---/ Verse No. ---)	
Name of Tantrayukti	
Justification of Tantrayuktis in Achieving Deeper Meaning and Logical Structure.	

Shloka with reference (Adhyaya No. ---/ Verse No. ---)	
Name of Tantrayukti	
Justification of Tantrayuktis in Achieving Deeper Meaning and Logical Structure.	

11. INTERVIEW OF SENIOR AYURVEDA VAIDYA

1.Name of Vaidya: Date

2.Specialization: _____

3.Years of Experience: _____

4.Location/Institution: _____

5.Mode of discussion (offline /Online/Phone): _____

Section 1: Practitioner's Journey

1.How did you get involved in Ayurveda? What inspired your journey?

Section 2: Philosophy and Principles

2. What is your core philosophy regarding Ayurveda and its fundamental principles?

Section 3: Current Practice

3. Could you briefly describe your current daily practice, treatments offered, and your approach to patient care?

Section 4: Challenges

4. What are the main challenges you face in practice, and how do you address them?

Section 5: Future of Ayurveda

5. What is your vision for the future of Ayurveda in the modern healthcare system?

Additional Notes

(For any special remarks, quotes, or important highlights)

12. INTERPRETATION OF CHAKRAPANI VYAKHYAN

Date of Activity:

Sr. No	Content	Details
1	Shloka	

2	Reference (Chapter, Section)	
3	Identify Key Terms from the Shloka (with English & Hindi Meaning)	
4	Explanation Available in Chakrapani Commentary	
5	Special Definitions in Vyakhyan (If Any)	
6	Bhavartha: Write complete meaning after reading Chakrapani in English or regional language	
7.	Others-	

13. SHLOKA RECITATION ACTIVITY

1.Shloka:

Meaning:

2. Shloka

Meaning

3. Shloka

Meaning

4. Shloka

Meaning

5. Shloka:

Meaning

6. Shloka

Meaning

7. Shloka

Meaning

8. Shloka

Meaning

9. Shloka

Meaning

10. Shloka:

Meaning

14. JUSTIFICATION OF THE CHRONOLOGICAL ARRANGEMENT OF ADHYAYAS IN CHIKITSA, KALPA, AND SIDDHI STHANA OF CHARAKA SAMHITA.

I. Chikitsasthana

Sr No	Name of Adhyaya	Purpose for the flow of Adhyayas	Rationality for their sequence	Clinical applicability.
1				
2				
3				
4				
5				

II. Kalpasthana.

Sr No	Name of adhyaya	Purpose for the flow of Adhyayas	Rationality for their sequence	Clinical applicability.
1				
2				
3				
4				

III. Siddhisthana

Sr No	Name of adhyaya	Purpose for the flow of Adhyayas	Rationality for their sequence	Clinical applicability.
1				
2				
3				
4				

COURSE CURRICULUM FOR THIRD PROFESSIONAL BAMS
(PRESCRIBED BY NCISM)



Atyaikachikitsa
(Emergency Medicine)

(SUBJECT CODE : AyUG-EM)

(Applicable from 2021-22 batch, from the academic year 2024-25 onwards for 5 batches or until further notification by NCISM, whichever is earlier)

ncism

।। आयुषे सर्वलोकानाम् ।।

BOARD OF AYURVEDA
NATIONAL COMMISSION FOR INDIAN SYSTEM OF MEDICINE
NEW DELHI-110026

NCISM

III Professional Ayurvedacharya (BAMS)

Subject Code : AyUG-EM

Atyaikachikitsa

(Emergency Medicine)

Summary

Total number of Teaching hours: 40			
Lecture (LH) - Theory		**0**	**0(LH)**
Paper I	0		
Non-Lecture (NLHT)		**12**	**40(NLH)**
Paper I	12		
Non-Lecture (NLHP)		**28**	
Paper I	28		

Examination (Papers & Mark Distribution)					
Item	**Theory Component Marks**	**Practical Component Marks**			
		Practical	**Viva**	**Elective**	**IA**
Paper I		0	0	-	0
Sub-Total	0				
Total marks	0				

Important Note :- The User Manual III BAMS is a valuable resource that provides comprehensive details about the curriculum file. It will help you understand and implement the curriculum. Please read the User Manual III before reading this curriculum file. The curriculum file has been thoroughly reviewed and verified for accuracy. However, if you find any discrepancies, please note that the contents related to the MSE should be considered authentic. In case of difficulty and questions regarding curriculum write to **syllabus24ayu@ncismindia.org**

PREFACE

Emergency treatment is a crucial aspect of every medical science, including Ayurveda. The Ashtanga Hridaya describes Ayurveda as being capable of saving lives by "cutting the noose of death," emphasizing its potential in managing life-threatening conditions. The Brihat Trayee—the foundational triad of Ayurvedic texts—provides comprehensive details on various emergency conditions such as Teevra Udakakshaya (severe dehydration), Shiro Marmabhighata (head injury), Hridroga (cardiac emergencies), and Sanyasa (coma), among others.

Despite the significant advancements in modern emergency medicine, limitations still exist in certain areas and patient populations. This underscores the necessity of exploring, mastering, and applying Ayurvedic principles in emergency care. Many Vaidyas have documented encouraging results in Ayurvedic emergency treatment, demonstrating its effectiveness in various critical conditions.

To ensure competency in handling emergencies, structured and rigorous training is essential. It is imperative that every Ayurveda graduate possesses foundational knowledge and practical training in the primary management of emergencies using Ayurvedic principles, alongside an understanding of relevant contemporary medical approaches.

This syllabus is designed with the objective of equipping students with the skills required for the effective integration of Ayurvedic emergency treatment. Through a balanced approach incorporating theoretical learning, hands-on practicals, and clinical exposure, students will be empowered to address emergency conditions with confidence and expertise.

INDEX

Course Code and Name of Course 5
Table 1 : Course learning outcomes and mapped PO 5
Table 2 : Contents of Course 6
Paper 1 6
Table 3 : Learning objectives of Course 11
Paper 1 11
Table 4 : NLHT Activity 27
Table 5 : List of Practicals 28
Table 6 : Assessment Summary: Assessment is subdivided in A to H points 30
6 A : Number of Papers and Marks Distribution 30
6 B : Scheme of Assessment (Formative and Summative) 30
6 C : Calculation Method for Internal assessment Marks 30
6 D : Evaluation Methods for Periodical Assessment 31
6 E : Question Paper Pattern 32
6 F : Distribution of theory examination 33
6 G : Instructions for UG Paper Setting & Blue print 34
6 H : Distribution of Practical Exam 35
References Books/ Resources 36
Syllabus Committee 37
Abbreviations 42

Course Code and Name of Course

Course code	Name of Course
AyUG-EM	Atyaikachikitsa

Table 1 : Course learning outcomes and mapped PO

SR1 CO No	A1 Course learning Outcomes (CO) AyUG-EM At the end of the course AyUG-EM, the students should be able to-	B1 Course learning Outcomes mapped with program learning outcomes.
CO1	Apply the principles and practices of Kayachikitsa to effectively manage various adult ailments, aligning with the Trisutra framework.	PO1
CO2	Integrate the application of multidisciplinary sciences, tools and techniques for a biopsychosocial approach towards diagnosis, prognosis & management of diseases including anukta roga to restore dhatusamya.	PO2,PO3,PO5
CO3	Construct treatment plans/protocols applying yukti in accordance with the Chikitsa sutra including pathya apathya with appropriate documentation adhering to legal, safety and regulatory standards.	PO1,PO3,PO4,PO5
CO4	Demonstrate the application of Rasayana and Vajikarana as prophylactic, therapeutic, restorative and palliative medicine.	PO1,PO4,PO5
CO5	Perform various skills (Karma kaushalya) in dealing with atyayika avastha including first aid and primary management	PO2,PO4,PO5
CO6	Demonstrate self directedness in pursuit of new advancements in the field of biomedical research and government health care policies.	PO7,PO9
CO7	Demonstrate agility, virtuous, ethical behaviour, compassion and communicate effectively with patients, relatives, and stakeholders about the prognosis and treatment including informed consent.	PO6,PO8,PO9

Table 2 : Contents of Course

Paper 1 (Atyayika Chikitsa)						
Sr. No	**A2 List of Topics**	**B2 Term**	**C2 Marks**	**D2 Lecture hours**	**E2 Non-Lecture hours Theory**	**E2 Non-Lecture hours Practical**
1	**Concept of Atyaya, and Atyayika Chikitsa** Definition and Ayurvedic perspective of Atyaya and Atyayika Vyadhi Clinical significance and types of Atyayika conditions Arishta Lakshana (Signs of impending death)	1	0	0	1	0
2	**Important factors related to Atyayika conditions** Role of Prana, Agni, Oja, Indriya, Bala, and Marma in Atyayika Avastha Significance of Trimarma (Shira, Hridaya, Basti) in emergencies Pathophysiology of these factors in life-threatening conditions	1		0	2	0
3	**Teevra Jwara Vega (Hyperpyrexia)** Classification: Swatantra Jwara and Paratantra Jwara Clinical examination and differentiation of fever in emergency conditions Ayurvedic and modern management, including Abhyantar Aushadhi, Basti, Dhoopana, Swedana, and Lepa	1		0	0	2
4	**Raktapitta- Teevra Raktasrava (Acute Hemorrhage)** Types of Raktapitta: Swatantra and Paratantra Raktapitta Clinical assessment of hemorrhagic conditions like	1		0	0	2

	Nasagata Raktapitta (Epistaxis) and Gudagata Raktapitta (Rectal bleeding) Management using Ayurvedic interventions (Bandha, Peedana, Parisheka, Lepa) and conventional emergency care					
5	**Teevra Udarashoola- {Acute abdomen, Acute abdominal pain)** Ayurvedic and modern approaches for acute abdominal pain assessment Key conditions: Renal colic, biliary colic, gastritis, pancreatitis, peritonitis, appendicitis Management using Basti, Nabhi Poorana, Agnikarma, Viddha, cupping, and Lepa	1		0	2	2
6	**Mutraghata- Mutrakricchra {including Anuria/Oliguria, retention of urine)** Types and causes of Mutraghata and Mutrakricchra Clinical differentiation of anuria, oliguria, and urinary retention Ayurvedic treatment modalities (Dhara, Parisheka, Lepa, Nabhi Poorana) and modern approaches	2		0	0	2
7	**Hridroga Atyayika Avastha (Management of Acute cardiac emergency conditions (including Acute coronary syndrome, Myocardial infarction, LVF, Arrhythmia)** Pathophysiology of Svatantra and Paratantra Hridroga in emergency conditions Recognition of acute coronary syndrome, myocardial infarction (MI), left ventricular failure (LVF), and arrhythmias Management using Ayurvedic drugs (Trailokyachintamani, Hemagarbha Pottali, Suvarna Sootashekhara), Hridbasti, Basti, and Lepa	2		0	0	3
8	**Stabdhata (Shock), Teevra Asahatva (Anaphylaxis) and Acute Hypersensitivity reaction)**	2		0	0	2

	Clinical presentation and classification of shock and hypersensitivity reactions Ayurvedic and conventional approaches for emergency stabilization					
9	**Murcha (Syncope) (SP98)** Causes and classification of Murcha (Syncope) based on Ayurveda and modern medicine Assessment of Atyayika Avastha in Murcha and emergency interventions	2		0	0	1
10	**Akshepaka, Apasmara Vega (Convulsions, Status epilepticus)** Differentiation of Akshepaka and Apasmara based on clinical presentation Role of Ayurveda in emergency seizure management Ayurvedic treatments: Pradhamana Nasya, Lepa, Vacha, Brahmi, etc.	2		0	0	1
11	**Prameha Upadrava (Diabetic ketoacidosis (DKA) and Hyperosmolar hyperglycemic state (HHS)), Raktasharkaralpata(Hypoglycaemia), Atyuchcha Raktasharkara (Hyperglycemia)** Recognition and clinical differentiation of Diabetic Ketoacidosis (DKA), Hyperosmolar Hyperglycemic State (HHS), Hypoglycemia, and Hyperglycemia Ayurvedic and conventional approaches for managing critical diabetes complications	2		0	1	1
12	**Teevra Shwasa Vega (Acute respiratory failure, Status asthmaticus, acute respiratory distress syndrome (ARDS), Chocking** Status asthmaticus, acute respiratory distress syndrome (ARDS), and choking Ayurvedic management including Bahya Snehana, Swedana, Dhooma, Nasya, Basti, Agnikarma, and Viddha	2		0	1	2
13	**Teevra Hikka (SM74)**	2		0	0	2

	Causes and complications of prolonged Hikka Ayurvedic interventions: Suvarna Sootashekhara, Suvarna Sameerapannaga, Nasya, Basti, Dhooma, Nabhipurana, Bahya Snehana, and Swedana, etc.					
14	**Teevra Chardhi and Sarakta Chardi** Causes of excessive vomiting and hematemesis Ayurvedic treatment including Shankha Bhasma, Mayurpicchamashi, Shubhra Bhasma, Jahar Mohara, and Viddha, etc.	2		0	0	2
15	**Teevra Atisara and Sarakta Atisara** Nirama Atisara (Severe diarrhea) and Raktatisara (Dysentery with blood loss) Management using Ayurvedic formulations like Shankhodara Rasa, Karpoora Rasa, Kanakasundar Rasa, and procedures like Viddha, Agnikarma, and Dhara, etc.	3		0	0	2
16	**Teevra Udakakshaya (including severe dehydration and electrolyte imbalance)** Ayurvedic and modern understanding of Udakakshaya Clinical assessment and emergency management, including fluid replacement therapy	3		0	1	1
17	**Teevra Pakshaghata Vega (including Acute Cerebrovascular accident (stroke) & Hyperventilation (panic attack)** Clinical evaluation and differentiation of Pakshaghata (Cerebrovascular accident—Stroke) Management using Ayurvedic drugs (Trailokyachintamani, Suvarna Sootashekhara, Siddha Makaradhvaja, Yogendra Rasa, Brihat Vatachintamani, etc), Nasya, Dhara, Parisheka, Agnikarma, and Viddha	3		0	0	2
18	**Adverse Drug Reaction and its management** Identification of adverse drug reactions in Ayurveda and modern medicine	3		0	1	0

	Ayurvedic principles for preventing and managing ADRs					
19	**Sanyasa (patients on the verge of death and comatose patients), Ayurvedic and conventional life saving medicines** Ayurvedic classification and stages of Sanyasa (Coma) Management approaches including Ayurvedic and modern lifesaving interventions Ayurvedic drugs: Hemagarbha Pottali, Trailokyachintamani, Suvarna Sootashekhara, Siddha Makaradhvaja, Mahalakshmivilasa, Sahasraputi Abhraka, Suvarna Sindoora, Yogendra Rasa, Brihat Vatachintamani, Jayamangal Rasa, Mallasindoora, Heeraka, etc. Conventional emergency drugs: Atropine, adrenaline, levipil, epsoline, dopamine, dobutamine, streptokinase, dextrose, calcium gluconate, cardarone, midazolam, mannitol, effcorlin, lignocaine, lasix, adenosine, magnesium sulfate, etc.	3		0	3	1
Total Marks			**0**	**0**	**12**	**28**

Table 3 : Learning objectives of Course

Paper 1 (Atyayika Chikitsa)										
A3 Course outcome	**B3 Learning Objective (At the end of the session, the students should be able to)**	**C3 Domain/sub**	**D3 MK / DK / NK**	**E3 Level**	**F3 T-L method**	**G3 Assessment**	**H3 Assessment Type**	**I3 Term**	**K3 Integration**	**L3 Type**
Topic 1 Concept of Atyaya, and Atyayika Chikitsa (LH :0 NLHT: 1 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO5	Explain the Ayurvedic concept of Atyaya and Atyayika Chikitsa.	CC	MK	KH	FC,PER,L_VC,L&PPT	CL-PR,P-VIVA	F	I	-	NLHT1.1
Non Lecture Hour Theory										
S.No	**Name of Activity**	**Description of Theory Activity**								
NLHT 1.1	Concept of Atyaya and Atyayika Chikitsa.	The teacher will explain the Ayurvedic concept of Atyaya and Atyayika Chikitsa by lecture with PPT or lecture with video clips. The students who have come prepared will discuss the aspects of Atyaya and Atyayika Chikitsa, while the teacher intervenes to suggest wherever improvement is needed.								
Non Lecture Hour Practical										
S.No	**Name of Practical**	**Description of Practical Activity**								
Topic 2 Important factors related to Atyayika conditions (LH :0 NLHT: 2 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO5	Explain the role of important factors like Prana, Agni etc. associated with Atyayika conditions.	CAN	MK	KH	L_VC,FC,L&PPT ,DIS	VV-Viva,CL-PR,PRN	F	I	-	NLHT2.1

Non Lecture Hour Theory		
S.No	**Name of Activity**	**Description of Theory Activity**
NLHT 2.1	Important factors related to Atyayika conditions like Prana, Agni, Oja, Marma, Indriya, Bala.	The teacher will explain important factors related to Atyayika conditions like Prana, Agni, Oja, Marma - especially Trimarma, Indriya, Bala, etc. with a PPT lecture or lecture with video clips. The students who have come prepared with basic information will discuss it in the classroom. While the teacher gives inputs for necessary improvement. Students will try to analyze the role of these factors in various patients.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**

Topic 3 Teevra Jwara Vega (Hyperpyrexia) (LH :0 NLHT: 0 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Implement management of Teevra Jwara (hyperpyrexia)	PSY-GUD	MK	SH	SIM,CBL,D-BED,PBL	P-MOD,P-PS, C-VC,OSCE	F	I	-	NLHP3.1

Non Lecture Hour Theory		
S.No	**Name of Activity**	**Description of Theory Activity**
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 3.1	Management of Teevra Jwara (hyperpyrexia)	Students will take history and perform clinical examinations under the guidance of a teacher. Through case-based learning, simulation, or bedside examination, they will attempt to comprehend the diagnosis as either Swatantra or Paratantra Jwara and the particular Avastha. They will make an effort to choose the drug and other Ayurvedic management techniques while also getting a basic understanding of traditional therapeutic approaches.

		The students will observe and assist the teacher in management including Abhyantar Aushadhi, Basti, Dhoopana, Swedana, Lepa, etc.

Topic 4 Raktapitta- Teevra Raktasrava (Acute Hemorrhage) (LH :0 NLHT: 0 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Apply management of Teevra Raktasrava (acute haemorrhage)	PSY-GUD	MK	SH	CBL,SIM,D-M, D-BED, PBL	C-VC,OSCE,SP,P-MOD,P-EN	F	I	H-SH	NLHP4.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 4.1	Management of Teevra Raktasrava (acute haemorrhage)	Students will examine the patient's bedside or on simulation or based on the case. They will try to understand the diagnosis in the form of Swatantra or Paratantra Raktapitta or other diseases and the exact Avastha, including the understanding based on conventional medicine. They will try to prepare a prescription including Abhyantar Aushadhi and other treatment modalities. They will observe and assist the teacher in the treatment including Abhyantar Aushadhi and other treatments like Bandha, Peedana, Parisheka, Lepa, etc. along with conventional management methods.

Topic 5 Teevra Udarashoola- {Acute abdomen, Acute abdominal pain) (LH :0 NLHT: 2 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Perform differential diagnosis and apply the treatment for Teevra Udarashoola (acute pain in the abdomen)	CAN	MK	SH	PBL,CBL,D,L_	P-MOD, C-VC,P-VIV	F	I	H-SH	NLHT5.1

					VC,L&PPT	A,OSCE,SP				
CO2, CO5	Perform differential diagnosis and apply treatment for Teevra Udarashoola (acute pain in the abdomen)	PSY-GUD	MK	SH	D-BED, CBL,SIM,D-M,PBL	P-CASE,SP,P-MOD,P-EN,OSCE	F	I	-	NLHP5.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 5.1	Differential diagnosis of Teevra Udarashoola (acute pain in the abdomen)	Through a lecture using PPT or videos, simulation, or case studies, the teacher will describe how to distinguish and evaluate Teevra Udarashoola (acute abdominal pain) as per Ayurveda and provide a brief overview of conventional medicine. Through simulation, case-based research, or bedside examination, the students will attempt to diagnose by themselves.

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 5.1	Management of Teevra Udarashoola (acute pain in the abdomen)	Students will attempt to precisely identify the diagnosis and particular Avastha based on bedside examination or simulation or video case or case-based learning. They will try to prepare a prescription including Abhyantar Aushadhi and other treatment modalities as per Ayurveda and a brief understanding of conventional medicine. They will observe and assist the teacher in the treatment including Abhyantar Aushadhi and other management methods like Basti, Nabhi Poorana, Agnikarma, Viddha, cupping, Lepa etc.

Topic 6 Mutraghata- Mutrakricchra {including Anuria/Oliguria, retention of urine) (LH :0 NLHT: 0 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Apply the treatment of Mutraghata and Mutrakricchra (including anuria, oliguria, and retention of urine)	PSY-GUD	MK	SH	PBL,D-M,D-BED,SIM, CBL	C-VC,P-VIVA,SP,P-MOD,OSCE	F	II	H-SH	NLHP6.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 6.1	Management of Mutraghata and Mutrakricchra (including anuria, oliguria, and urine retention)	Students will examine the patient's bedside or study by simulation or case-based learning or video case. They will try to understand the diagnosis and specific Avastha as per Ayurveda and with a brief understanding of conventional medicine. They will try to decide on the Abhyantar Aushadhi and other treatment modalities. They will observe and assist the teacher in Abhyantar Chikitsa and other management methods like Dhara, Parisheka, Lepa, Nabhi Poorana, etc. as per Ayurveda and considering conventional methods on actual patients or models.

Topic 7 Hridroga Atyayika Avastha (Management of Acute cardiac emergency conditions (including Acute coronary syndrome, Myocardial infarction, LVF, Arrhythmia) (LH :0 NLHT: 0 NLHP: 3)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Apply the primary management of Hridroga Atyayika Avastha (acute cardiac emergencies)	PSY-GUD	MK	SH	D-BED, FC,SIM ,PBL,CBL	P-PS,SP,PM, C-VC,OSCE	F	II	-	NLHP7.1

Non Lecture Hour Theory		
S.No	**Name of Activity**	**Description of Theory Activity**
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 7.1	Primary management of Hridroga Atyayika Avastha (acute cardiac emergencies)	Students will take a quick history of the patient and perform a clinical examination at the bedside, or based on simulation or case-based learning. They will try to differentiate and diagnose the exact condition as per Ayurveda with a supportive understanding of conventional medicine. With discussion, they will try to understand the condition, under the teacher's guidance. They will try to prepare a prescription including Abhyantar Chikitsa and other treatment modalities. They will observe and assist the teacher in the management with Abhyantar Chikitsa like Trailokyachintamani, Hemagarbha Pottali, Suvarna Sootashekhara, Siddha Makaradhvaja etc., and also in Hridbasti, Basti, Lepa etc.

Topic 8 Stabdhata (Shock), Teevra Asahatva (Anaphylaxis) and Acute Hypersensitivity reaction) (LH :0 NLHT: 0 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Demonstrate preparedness to manage Stabdhata (shock), Teevra Asahatva (anaphylaxis and acute hypersensitivity reaction)	PSY-GUD	MK	KH	PBL,L_VC,D-M,CBL, FC	P-CASE,P-MOD,SP, C-VC,P-PS	F	II	-	NLHP8.1

Non Lecture Hour Theory		
S.No	**Name of Activity**	**Description of Theory Activity**
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**

NLHP 8.1	Management of Stabdhata (shock) and Teevra Asahatva (Anaphylaxis and acute hypersensitivity reaction)	The teacher will demonstrate the case of Stabdhata (shock) and Teevra Asahatva (anaphylaxis and acute hypersensitivity reaction) bedside or through simulation or case videos. The teacher will explain the possible Ayurvedic management and the management by conventional medicine. Students will take a quick history of the patients or will observe through simulations, case videos, etc. They will try to understand the specific conditions and try to write the management with assessment and guidance from the teacher. They will observe and assist the teacher in actual management.

Topic 9 Murcha (Syncope) (SP98) (LH :0 NLHT: 0 NLHP: 1)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Illustrate the difference and management of Atyayika Avastha of Murcha (syncope)	PSY-GUD	MK	KH	RP,L_VC,SIM, D-BED, PBL	C-VC,SP,P-EN,P-MOD,P-PS	F	II	-	NLHP9.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 9.1	Management of Atyayika Avastha of Murcha (syncope)	The students will take a brief history and examine the patient's bedside or through simulation or video cases. They will try to differentiate and identify the Atyayika Avastha of Murcha. They will try to decide the line of treatment under the guidance of the teacher. They will observe and assist the teacher in the management.

Topic 10 Akshepaka, Apasmara Vega (Convulsions, Status epilepticus) (LH :0 NLHT: 0 NLHP: 1)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO2, CO5	Demonstrate preparedness to apply the management for Akshepaka (convulsions and Teevra Apasmara (status epilepticus)	PSY-GUD	MK	SH	SIM,RP,D-M,D-BED,CBL	P-MOD,P-EN,SP, C-VC	F	II	-	NLHP10.1

Non Lecture Hour Theory		
S.No	**Name of Activity**	**Description of Theory Activity**

Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 10.1	Management of Akshepaka (convulsions) and Teevra Apasmara (status epilepticus)	The teacher will explain on bedside case or by simulation or video cases On specific conditions, the students will examine, assess, and try to decide the line of treatment as per Ayurveda, with knowledge of conventional medicine. Role plays can be used to understand the actual activities required during the management.

Topic 11 Prameha Upadrava (Diabetic ketoacidosis (DKA) and Hyperosmolar hyperglycemic state (HHS)), Raktasharkaralpata(Hypoglycaemia), Atyuchcha Raktasharkara (Hyperglycemia) (LH :0 NLHT: 1 NLHP: 1)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO2, CO5	Show preparedness to manage Prameha Upadrava (important diabetic complications)	CC	MK	KH	FC,DIS,PBL,PER,L&PPT	PRN,VV-Viva	F	II	-	NLHT11.1
CO2, CO5	Apply the primary management for Prameha Upadrava (important diabetic complications)	PSY-GUD	MK	SH	CBL,SIM,PBL,	P-MOD,SP,OSCE,P-	F	II	-	NLHP11.1

					D-BED	PS,P-CASE				

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 11.1	Primary management of Prameha Upadrava (important diabetic complications)	Students divided into small groups will be assigned specific topics related to Prameha Upadrava (including diabetic ketoacidosis, hyperosmolar hyperglycemic state, hypoglycemia, and hyperglycemia) which result in Atyayika Avastha. Students will study and come prepared and present their topics, followed by a discussion under the guidance and supervision of the teacher. They will understand the possible Ayurvedic management along with the conventional management.

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 11.1	Primary management of Prameha Upadrava (important diabetic complications)	Students will take a brief history and examine the patient's bedside or with the help of simulation or through case-based learning. Under teacher guidance, they will prepare the plan for possible Ayurvedic management or the conventional management of Prameha Upadrava (including diabetic ketoacidosis, hyperosmolar hyperglycemic status, hypoglycemia, or hyperglycemia). They will observe and assist in the actual management done by the teacher.

Topic 12 Teevra Shwasa Vega (Acute respiratory failure, Status asthmaticus, acute respiratory distress syndrome (ARDS), Chocking (LH :0 NLHT: 1 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Describe Teevra Shvasa Vega (including acute respiratory failure, status asthmaticus, acute respiratory distress syndrome, and choking)	CC	MK	KH	FC,L_VC,PER, CBL,L &PPT	CL-PR,VV-Viva,T-CS	F	II	-	NLHT12.1

CO2, CO5	Apply management of Teevra Shvasa (including acute respiratory failure, status asthmaticus, acute respiratory distress syndrome, and choking)	PSY-GUD	MK	SH	D-M,SIM,CBL,PBL,D-BED	C-VC,SP,P-MOD,PM,OSCE	F	II	-	NLHP12.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 12.1	Teevra Shvasa Vega	The teacher will explain the emergencies related to Teevra Shvasa Vega by lecture with PPT or video clips. The teacher will assign topics related to Teevra Shvasa Vega to the students. They will present their topics followed by understanding specific conditions based on specific cases.

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 12.1	Primary management of Teevra Shvasa Vega	The students will take a brief history and examine the patient's bedside or assess by simulation or based on a case. They will try to prepare the Ayurvedic method of management with knowledge about conventional management. They will understand and perform the Heimlich maneuver for choking on the model or by simulation. They will observe and assist the teacher in actual management with Abhyantar Chikitsa with medicines like Hemagarbha Pottali, Trailokyachintamani, Mallasindoora, Siddha Makaradhvaja, etc. given in Muhurmuhu Kala, applied on gums in case of unconscious patients. And also in procedures like Bahya Snehana, Swedana, Dhooma, Nasya, Basti Agnikarma and Viddha, etc.

Topic 13 Teevra Hikka (SM74) (LH :0 NLHT: 0 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3

CO2, CO5	Apply management of Teevra Hikka.	PSY-GUD	MK	SH	CBL,PBL,D-BED,SIM	C-VC,P-PS,P-MOD,OSCE,SP	F	II	-	NLHP13.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 13.1	Management of Teevra Hikka	The students will take a brief history and examine the patient's bedside or assess through simulation or based on case. Under the teacher's guidance, they will try to prepare the management plan. They will observe and assist the teacher in the management including Abhyantar Aushadhi like Suvarna Sootashekhara, Suvarna Sameerapannaga, etc, given in Muhurmuhu Kala, and other procedures like Nasya, Basti, Dhooma, Nabhipurana, Bahya Snehana, Swedana, etc.

Topic 14 Teevra Chardhi and Sarakta Chardi (LH :0 NLHT: 0 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Apply primary management of Teevra Chardi and Sarakta Chardi	PSY-SET	MK	SH	D-BED, CBL,PBL,SIM	P-MOD, C-VC,OSCE, SP	F	II	H-SH	NLHP14.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity

NLHP 14.1	Management of Teevra Chardi and Sarakta Chardi	The students will take a brief history and examine the patient's bedside or assess through simulation or video or based on the case. Under the guidance of the teacher, they will try to plan management as per Ayurveda with the necessary understanding of conventional medicine. They will assess whether the patients can be treated medically or if they need to be referred for surgical management. They will observe and assist the teacher in the actual management including internal medicines like Shankha Bhasma, Mayurpicchamashi, Shubhra Bhasma, Jahar Mohara, etc., and other modalities like Viddha, Agnikarma, etc.

Topic 15 Teevra Atisara and Sarakta Atisara (LH :0 NLHT: 0 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Apply management of Teevra Atisara and Sarakta Atisara	PSY-SET	MK	SH	PBL,PSM,SIM, CBL,D-BED	PM,P-VIVA, C-VC,SP,OSCE	F	III	H-SH	NLHP15.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 15.1	Management of Teevra Atisara and Sarakta Atisara	The students will assess the patient with Svatantra and Paratantra Atisara and its specific Atyayika condition based on actual examination or by simulation or case-based learning They will try to decide on the Ayurvedic treatment plan with essential knowledge of conventional medicine. They will also understand whether the patients can be treated medically or if they need to be referred for surgical management.

		They will observe and assist the teacher in actual treatment including Abhyantar Aushadhi like Shankhodara Rsa, Karpoora Rasa, Kanakasundar Rasa, Sarvangasundar Rasa, Shankha Bhasma, etc., and other treatment modalities like Viddha, Agnikarma, Dhara, etc.

Topic 16 Teevra Udakakshaya (including severe dehydration and electrolyte imbalance) (LH :0 NLHT: 1 NLHP: 1)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Demonstrate preparedness for management of Teevra Udakakshaya (including severe dehydration and electrolyte imbalance)	PSY-GUD	MK	KH	L&PPT,D-M,L_VC,FC,D	CL-PR, C-VC,T-CS,PRN,VV-Viva	F	III	-	NLHT16.1
CO2, CO5	Demonstrate primary management of Teevra Udakakshaya (including severe dehydration and electrolyte imbalance)	PSY-GUD	MK	SH	KL,SIM,CBL,PBL,D-M	P-MOD,OSCE,P-PS,PM,SP	F	III	-	NLHP16.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 16.1	Understanding Teevra Udakakshaya (including severe dehydration and electrolyte imbalance)	The teacher will explain Teevra Udakakshaya with a lecture with PPT or video, and demonstrate on the model. The teacher will explain about assessment of Udakakshaya and Teevra Udakakshaya which can be Atyayika Avastha. The students will discuss and understand various aspects in the classroom.

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 16.1	Primary management of Teevra Udakakshaya (including severe dehydration and electrolyte	Students will examine the patient's bedside or assess through simulation or videos or based on the case. They will try to plan management as per Ayurveda and also conventional medicine.

	imbalance)	They will practically perform the procedures like intravenous fluid administration on models. They will observe and assist the teacher in actual management procedures.

Topic 17 Teevra Pakshaghata Vega (including Acute Cerebrovascular accident (stroke) & Hyperventilation (panic attack) (LH :0 NLHT: 0 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Demonstrate primary management of Teevra Pakshaghata Vega (acute cerebrovascular accident, stroke).	PSY-GUD	MK	SH	SIM,D-M,D-BED,PBL, CBL	C-VC,PM, P-EN,OSCE,SP	F	III	H-SH	NLHP17.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 17.1	Primary management of Teevra Pakshaghata Vega (acute cerebrovascular accident, stroke)	The students will take a brief history and examine the patient's bedside, or assess by simulation or videos or based on the case. They will try to decide on the management plan as per Ayurveda with essential knowledge of conventional medicine, based on Samprapti. They will learn to perform procedures on models or in the skill lab. They will observe and assist the teacher in the management like Abhyantar Aushadhi like Trailokyachintamani, Suvarna Sootashekhara, Siddha Makaradhvaja, Yogendra Rasa, Brihat Vatachintamani, etc. (applied on gums in unconscious patients), and procedures like Basti, Nasya, Dhara, Parisheka, Bahya Snehana, Swedana, Agnikarma, Viddha, etc.

Topic 18 Adverse Drug Reaction and its management (LH :0 NLHT: 1 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Describe preparedness for the management of adverse drug reactions.	CC	MK	KH	SIM,L&GD,L&PPT ,L_VC,FC	CL-PR,OSCE,P-PS,SP,P-VIVA	F	III	-	NLHT18.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 18.1	Management of adverse drug reactions.	Teachers will explain conventional adverse drug reactions and the Ayurvedic approach to them, with a lecture with PPT or videos. Students will be assigned specific topics related to this and they will study and discuss in the classroom.

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity

Topic 19 Sanyasa (patients on the verge of death and comatose patients), Ayurvedic and conventional life saving medicines (LH :0 NLHT: 3 NLHP: 1)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Understand the treatment of Sanyasa (patients on the verge of death and comatose patients) and about Ayurvedic and conventional life-saving drugs.	CC	MK	KH	FC,L&PPT ,DIS,L_VC	PRN,VV-Viva	F	III	-	NLHT19.1
CO2, CO5	Apply the treatment of Sanyasa (patients on the verge of death and comatose patients)	PSY-SET	MK	SH	PSM,D-BED,PBL,CBL,SIM	SP,OSCE,P-PS, C-VC,PM	F	III	-	NLHP19.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 19.1	The treatment of Sanyasa (patients on the verge of death and comatose patients) and Ayurvedic and conventional life-saving drugs.	The teacher will explain the treatment of Sanyasa (patients on the verge of death and comatose patients) with a lecture with PPT or videos. The teacher will explain the mode of action and use of Ayurvedic life-saving drugs like Hemagarbha Pottali, Trailokyachintamani, Suvarna Sootashekhara, Siddha Makaradhvaja, Mahalakshmivilasa, Sahasraputi Abhraka, Suvarna Sindoora, Yogendra Rasa, Brihat Vatachintamani, Jayamangal Rasa, Mallasindoora, Heeraka, etc. The teacher will explain the mode of action and uses of conventional life-saving drugs like Inj. atropine, adrenaline, levipil, epsoline, dopamine, dobutamine, streptokinase, dextrose, calcium gluconate, cardarone, midazolam, mannitol, efcorlin, lignocaine, lasix, adenosine, magnesium sulfate, etc.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 19.1	Treatment of Sanyasa (patients on the verge of death and comatose patients)	The students will take a quick history and examine the patient's bedside, or assess on simulation or based on cases. They will try to decide the management methods under the guidance of the teacher. They will observe and assist the teacher in treatment including Abhyantar Aushadhi life-saving drugs like Hemagarbha Pottali, Trailokyachintamani, Suvarna Sootashekhara Pottali, etc. administered Muhurmuhu, applied on gums in case of unconscious patients, and also other methods like Pradhamana Nasya, Lepa, Udgharshana, etc.

Table 4 : NLHT Activity

(*Refer table 3 of similar activity number)

Activity No*	CO No	Activity details
1.1	CO5	Concept of Atyaya and Atyayika Chikitsa.
2.1	CO5	Important factors related to Atyayika conditions like Prana, Agni, Oja, Marma, Indriya, Bala.
5.1	CO2,CO5	Differential diagnosis of Teevra Udarashoola (acute pain in the abdomen)
11.1	CO2,CO5	Primary management of Prameha Upadrava (important diabetic complications)
12.1	CO2,CO5	Teevra Shvasa Vega
16.1	CO2,CO5	Understanding Teevra Udakakshaya (including severe dehydration and electrolyte imbalance)
18.1	CO2,CO5	Management of adverse drug reactions.
19.1	CO2,CO5	The treatment of Sanyasa (patients on the verge of death and comatose patients) and Ayurvedic and conventional life-saving drugs.

Table 5 : List of Practicals

(*Refer table 3 of similar activity number)

Practical No*	CO No	Practical Activity details
3.1	CO2,CO5	Management of Teevra Jwara (hyperpyrexia)
4.1	CO2,CO5	Management of Teevra Raktasrava (acute haemorrhage)
5.1	CO2,CO5	Management of Teevra Udarashoola (acute pain in the abdomen)
6.1	CO2,CO5	Management of Mutraghata and Mutrakricchra (including anuria, oliguria, and urine retention)
7.1	CO2,CO5	Primary management of Hridroga Atyayika Avastha (acute cardiac emergencies)
8.1	CO2,CO5	Management of Stabdhata (shock) and Teevra Asahatva (Anaphylaxis and acute hypersensitivity reaction)
9.1	CO2,CO5	Management of Atyayika Avastha of Murcha (syncope)
10.1	CO2,CO5	Management of Akshepaka (convulsions) and Teevra Apasmara (status epilepticus)
11.1	CO2,CO5	Primary management of Prameha Upadrava (important diabetic complications)
12.1	CO2,CO5	Primary management of Teevra Shvasa Vega
13.1	CO2,CO5	Management of Teevra Hikka
14.1	CO2,CO5	Management of Teevra Chardi and Sarakta Chardi
15.1	CO2,CO5	Management of Teevra Atisara and Sarakta Atisara
16.1	CO2,CO5	Primary management of Teevra Udakakshaya (including severe dehydration and electrolyte imbalance)
17.1	CO2,CO5	Primary management of Teevra Pakshaghata Vega (acute cerebrovascular accident, stroke)
19.1	CO2,CO5	Treatment of Sanyasa (patients on the verge of death and comatose patients)

Table 6 : Assessment Summary: Assessment is subdivided in A to H points

6 A : Number of Papers and Marks Distribution

Subject Code	Papers	Theory	Practical/Clinical Assessment (0)					Grand Total
			Practical	Viva	Elective	IA	Sub Total	
AyUG-EM	0	0	0	0	-	0	0	0

6 B : Scheme of Assessment (Formative and Summative)

PROFESSIONAL COURSE	FORMATIVE ASSESSMENT			SUMMATIVE ASSESSMENT
	First Term (1-6 Months)	Second Term (7-12 Months)	Third Term (13-18 Months)	
Third	NA	NA	NA	**NA**

PA: Periodical Assessment; **TT:** Term Test; **UE:** University Examinations; **NA:** Not Applicable.
******University Examination shall be on entire syllabus

6 C : Calculation Method for Internal assessment Marks

Not applicable

6 D : Evaluation Methods for Periodical Assessment

S. No.	Evaluation Methods
1.	Practical / Clinical Performance
2.	Viva Voce, MCQs, MEQ (Modified Essay Questions/Structured Questions)
3.	Open Book Test (Problem Based)
4.	Summary Writing (Research Papers/ Samhitas)
5.	Class Presentations; Work Book Maintenance
6.	Problem Based Assignment
7.	Objective Structured Clinical Examination (OSCE), Objective Structured Practical Examination (OPSE), Mini Clinical Evaluation Exercise (Mini-CEX), Direct Observation of Procedures (DOP), Case Based Discussion (CBD)
8.	Extra-curricular Activities, (Social Work, Public Awareness, Surveillance Activities, Sports or Other Activities which may be decided by the department).
9.	Small Project
10.	Activities Indicated in Table 3 - Column G3 as per Indicated I, II or III term in column I3.

6 E : Question Paper Pattern

III PROFESSIONAL BAMS EXAMINATIONS
AyUG-AC
PAPER-I
Time: 0 Hours Maximum Marks: 0
INSTRUCTIONS: All questions compulsory

		Number of Questions	**Marks per question**	**Total Marks**
Q 1	MULTIPLE CHOICE QUESTIONS (MCQ)	0	0	0
Q 2	SHORT ANSWER QUESTIONS (SAQ)	0	0	0
Q 3	LONG ANSWER QUESTIONS (LAQ)	0	0	0
				0

6 F : Distribution of theory examination

Not Applicable

6 G : Instructions for UG Paper Setting & Blue print

Not Applicable

6 H : Distribution of Practical Exam

Not Applicable

References Books/ Resources

S.No	Resources
1	Dr. Bramhadatta Sharma. Atyayik Vyadhi Nidana Chikitsa. Chaukhamba Sanskrit Pratishthan. Delhi. 2015.
2	Peter Cameron, George Jelinek, Anne-Maree Kelly, Lindsay Murray, Anthony F. T. Brown Textbook of Adult Emergency Medicine. Elsevier; 5th edition.2019
3	S.N.Chugh, Ashima Chugh. Emergency medicine for students and practitioners. ?CBS, Fifth edition, 2019.
4	Dixit U. Emergency medicine in Ayurveda. In: Deole Y.S., Basisht G., eds. Charak Samhita New Edition. 1st ed. Jamnagar, Ind: CSRTSDC; 2020. https://www.carakasamhitaonline.com/mediawiki-1.32.1/index.php?title=Emergency_medicine_in_Ayurveda&oldid=44712. Accessed February 4, 2025.

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Abbreviations

Domain		T L Method		Level		Assessment		Integration	
CK	Cognitive/Knowledge	L	Lecture	K	Know	T-CS	Theory case study	V-RS	V RS
CC	Cognitive/Comprehension	L&PPT	Lecture with PowerPoint presentation	KH	Knows how	T-OBT	Theory open book test	V-KS	V KS
CAP	Cognitive/Application	L&GD	Lecture & Group Discussion	SH	Shows how	P-VIVA	Practical Viva	H-KC	H KC
CAN	Cognitive/Analysis	L_VC	Lecture with Video clips	D	Does	P-REC	Practical Recitation	H-SH	H SH
CS	Cognitive/Synthesis	REC	Recitation			P-EXAM	Practical exam	H-PK	H PK
CE	Cognitive/Evaluation	SY	Symposium			PRN	Presentation	H-SHL	H SHL
PSY-SET	Psychomotor/Set	TUT	Tutorial			P-PRF	Practical Performance	H-SP	H SP
PSY-GUD	Psychomotor/Guided response	DIS	Discussions			P-SUR	Practical Survey	H-KB	H-KB
PSY-MEC	Psychomotor/Mechanism	BS	Brainstorming			P-EN	Practical enact	H-Samhita	H-Samhita
PSY-ADT	Psychomotor Adaptation	IBL	Inquiry-Based Learning			P-RP	Practical Role play	V-DG	V DG
PSY-ORG	Psychomotor/Origination	PBL	Problem-Based Learning			P-MOD	Practical Model	V-RN	V RN
AFT-REC	Affective/ Receiving	CBL	Case-Based Learning			P-POS	Practical Poster	V-RS	V RS
AFT-RES	Affective/Responding	PrBL	Project-Based Learning			P-CASE	Practical Case taking	V-AT	V AT
AFT-VAL	Affective/Valuing	TBL	Team-Based Learning			P-ID	Practical identification	V-SW	V SW
AFT-SET	Affective/Organization	TPW	Team Project Work			P-PS	Practical Problem solving		
AFT-CHR	Affective/ characterization	FC	Flipped Classroom			QZ	Quiz		
PSY-PER	Psychomotor/perception	BL	Blended Learning			PUZ	Puzzles		
PSY-COR	Psychomotor/ Complex Overt Response	EDU	Edutainment			CL-PR	Class Presentation		
		ML	Mobile Learning			DEB	Debate		
		ECE	Early Clinical Exposure			WP	Word puzzle		
		SIM	Simulation			O-QZ	Online quiz		
		RP	Role Plays			O-GAME	Online game-based assessment		
		SDL	Self-directed learning			M-MOD	Making of Model		
		PSM	Problem-Solving Method			M-CHT	Making of Charts		
		KL	Kinaesthetic Learning			M-POS	Making of Posters		

		W	Workshops			C-INT	Conducting interview		
		GBL	Game-Based Learning			INT	Interactions		
		LS	Library Session			CR-RED	Critical reading papers		
		PL	Peer Learning			CR-W	Creativity Writing		
		RLE	Real-Life Experience			C-VC	Clinical video cases		
		PER	Presentations			SP	Simulated patients		
		D-M	Demonstration on Model			PM	Patient management problems		
		PT	Practical			CHK	Checklists		
		X-Ray	X-ray Identification			Mini-CEX	Mini-CEX		
		CD	Case Diagnosis			DOPS	DOPS		
		LRI	Lab Report Interpretation			CWS	CWS		
		DA	Drug Analysis			RS	Rating scales		
		D	Demonstration			RK	Record keeping		
		D-BED	Demonstration Bedside			COM	Compilations		
		DL	Demonstration Lab			Portfolios	Portfolios		
		DG	Demonstration Garden			Log book	Log book		
		FV	Field Visit			TR	Trainers report		
						SA	Self-assessment		
						PA	Peer assessment		
						360D	360-degree evaluation		
						PP-Practical	Practical		
						VV-Viva	Viva		
						DOAP	Demonstration Observation Assistance Performance		
						SBA	Scenario Based Assessment		
						CBA	Case based Assessment		
						S-LAQ	Structured LAQ		
						OSCE	Observed Structured Clinical Examination		
						OSPE	Observed Structured Practical Examination		
						DOPS	Direct observation of procedural skills		

COURSE CURRICULUM FOR THIRD PROFESSIONAL BAMS
(PRESCRIBED BY NCISM)



Research Methodology and Medical-statistics

(SUBJECT CODE : AyUG-RM)

(Applicable from 2021-22 batch, from the academic year 2024-25 onwards for 5 batches or until further notification by NCISM, whichever is earlier)

ncism

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BOARD OF AYURVEDA
NATIONAL COMMISSION FOR INDIAN SYSTEM OF MEDICINE
NEW DELHI-110026

NCISM

III Professional Ayurvedacharya (BAMS)

Subject Code : AyUG-RM

Research Methodology and Medical-statistics

Summary

Total number of Teaching hours: 75			
Lecture (LH) - Theory		**25**	**25(LH)**
Paper I	25		
Non-Lecture (NLHT)		**50**	**50(NLH)**
Paper I	50		
Non-Lecture (NLHP)		**0**	
Paper I	0		

Examination (Papers & Mark Distribution)					
Item	**Theory Component Marks**	**Practical Component Marks**			
		Practical	**Viva**	**Elective**	**IA**
Paper I	50	-	-	-	-
Sub-Total	50	-			
Total marks	50				

Important Note :- The User Manual III BAMS is a valuable resource that provides comprehensive details about the curriculum file. It will help you understand and implement the curriculum. Please read the User Manual III before reading this curriculum file. The curriculum file has been thoroughly reviewed and verified for accuracy. However, if you find any discrepancies, please note that the contents related to the MSE should be considered authentic. In case of difficulty and questions regarding curriculum write to **syllabus24ayu@ncismindia.org**

PREFACE

Research is a crucial component of scientific progress, and its inclusion in the undergraduate Ayurveda curriculum strengthens the foundation of evidence-based practice. Ayurveda, as a traditional system of medicine, requires systematic validation through research to align with contemporary healthcare needs. Introducing research methodology at the undergraduate level enables students to critically evaluate classical texts, explore integrative medicine, and develop scientific reasoning. This knowledge helps in hypothesis formulation, data analysis, and meaningful interpretation, ultimately enhancing the credibility of Ayurveda in the global healthcare system.

With the advancement of new Teaching-Learning (TL) methods, such as problem-based learning (PBL), experiential learning, digital tools, and artificial intelligence, students can actively engage with research concepts. Methods like flipped classrooms, case-based discussions, and hands-on practicals allow a deeper understanding of study designs, statistical tools, and critical appraisal techniques. The application of these techniques ensures accuracy and reliability in Ayurvedic research. Furthermore, learning about intellectual property rights (IPR), ethical considerations, and research reporting guidelines prepares students to contribute to academic publications, innovation, and policy-making in Ayurveda.

In the third professional year, research training plays a transformative role by bridging theoretical knowledge with clinical application. At this stage, students are exposed to clinical trials, literary research, preclinical studies, and statistical analysis, enabling them to integrate research findings into patient care. This phase prepares students for advanced clinical decision-making, postgraduate studies, and scientific contributions. By fostering analytical thinking and innovation, research education ensures that Ayurveda remains a dynamic and evolving system of medicine, blending ancient wisdom with modern scientific advancements for holistic and evidence-based healthcare.

INDEX

Course Code and Name of Course 5
Table 1 : Course learning outcomes and mapped PO 5
Table 2 : Contents of Course 6
Paper 1 6
Table 3 : Learning objectives of Course 10
Paper 1 10
Table 4 : NLHT Activity 38
Table 5 : List of Practicals 40
Table 6 : Assessment Summary: Assessment is subdivided in A to H points 41
6 A : Number of Papers and Marks Distribution 41
6 B : Scheme of Assessment (Formative and Summative) 41
6 C : Calculation Method for Internal assessment Marks 41
6 D : Evaluation Methods for Periodical Assessment 42
6 E : Question Paper Pattern 43
6 F : Distribution of theory examination 44
Paper 1 44
6 G : Instructions for UG Paper Setting & Blue print 45
6 H : Distribution of Practical Exam 46
References Books/ Resources 47
Syllabus Committee 48
Abbreviations 52

Course Code and Name of Course

Course code	Name of Course
AyUG-RM	Research Methodology and Medical-statistics

Table 1 : Course learning outcomes and mapped PO

SR1 CO No	A1 Course learning Outcomes (CO) AyUG-RM At the end of the course AyUG-RM, the students should be able to-	B1 Course learning Outcomes mapped with program learning outcomes.
CO 1	Explain and utilize research methods and statistical concepts.	PO1,PO2
CO 2	Distinguish, analyse and apply research types. Recognize their application in ayurveda.	PO2,PO9
CO 3	Explore and utilize various databases and guidelines.	PO2,PO8
CO 4	Distinguish, analyse and apply statistical tests. Recognize their application in ayurveda.	PO2,PO9
CO 5	Apply ethical aspect in conducting quality research.	PO6,PO9

Table 2 : Contents of Course

Paper 1 (RM-MS)						
Sr. No	**A2 List of Topics**	**B2 Term**	**C2 Marks**	**D2 Lecture hours**	**E2 Non-Lecture hours Theory**	**E2 Non-Lecture hours Practical**
1	**Introduction to Research** 1. Objectives 2. Need and Scope 3. Concept of Evidence-Based Medicine and Integrative Medicine	2	30	1	0	0
2	**Historical developments in research** 1. Describe historical development of Contemporary research. 2. Identify evidences of research in ayurveda classical literature.	2		0	1	0
3	**Research Types** 1. Primary and Secondary 2. Basic, Applied and Translational 3. Qualitative, Quantitative and Mixed 4. Observational and Interventional 5. Descriptive and Analytical	2		2	2	0
4	**Research Ethics** 1. Need and significance 2. Institutional Animal Ethics Committee (IAEC) and Institutional Human Ethics Committee (IHEC/IEC). 3. Publications ethics	2		1	1	0
5	**Research Designs and terminologies** 1. Case reports 2. Case Series 3. Cross sectional and longitudinal 4. Cohort studies 5. Case Control 6. Clinical trials (Randomised controlled trials) 7. Literary Research and reviews 8. Preclinical Methods (In-silico, In-vitro, In situ and In-vivo).	2		4	8	0

	9. Terminologies: Randomisation, matching, Blinding, and Bias.					
6	**Research process** 1. Selecting a research topic and research problem 2. Reviewing of literature. 3. Formulating research hypothesis and objectives 4. Planning the research (materials and methods) 5. Conducting the research (data collection, analysis and interpretation) 6. Drawing conclusions. 7. Reporting of Research (Scientific writing)	2		3	6	0
7	**Different Database, portals and Artificial Intelligence.** 1. Database like PubMed, SCOPUS etc. 2. Portals like AYUSH Research Portal, NAMASTE etc. 3. Artificial Intelligence.	2		1	3	0
8	**Different Guidelines to report research** Different guidelines like CARE, CONSORT, ARRIVE etc.	2		0	2	0
9	**Intellectual Property Right (IPR)/Patent/ TKDL** Importance Intellectual Property Right (IPR)/Patent/ TKDL	2		1	0	0
10	**Research Critiquing** Different steps involved in critiquing research works	2		1	2	0
11	**Introduction to Medical statistics** 1. Objectives 2. Types (Descriptive and Inferential) 3. Scope and Relevance pertaining to Ayurveda	2	20	1	1	0
12	**Data** 1. Concept of Data in Medical Statistics 2. Sources of Data.	2		1	2	0

	3. Types of Data: Quantitative and Qualitative (categorical), Discrete and continuous. 4. Types of Scales: ordinal, nominal, interval and ratio scale.				
13	**Basic statistical terms** 1. Population 2. Sample and sampling 3. Variable (Dependent and Intendent) 4. Attributes	2	1	1	0
14	**Collection and Presentation of Data** 1. Types of Data Collection (Primary and Secondary) 2. Types of Presentation of data (Textual, Tabular and Graphical)	2	2	4	0
15	**Measures of Central Tendency** 1. Arithmetic Mean 2. Median 3. Mode 4. Qualities of Good measure of central tendency	2	1	2	0
16	**Measures of Deviation/Dispersion/Variability** 1. Range 2. Quartile deviation 3. Mean deviation 4. Standard deviation 5. Variance and Co-efficient of Variation. 6. Standard error 7. Qualities of good measure of variability	2	1	4	0
17	**Probability** 1. Fundamental of Probability 2. Normal Distribution Curve and its properties	2	1	3	0
18	**Hypothesis and Test of Significance** Hypothesis and Test of Significance	2	1	3	0
19	**Parametric and non-parametric tests** Parametric and non-parametric tests	2	1	2	0

20	**Concept of Co-relation and Regression** **Explain Co-relation and Regression**	2		1	1	0
21	**Commonly used Statistically software** Commonly used Statistically software	2		0	2	0
Total Marks			**50**	**25**	**50**	**0**

Table 3 : Learning objectives of Course

Paper 1 (RM-MS)										
A3 Course outcome	**B3 Learning Objective (At the end of the session, the students should be able to)**	**C3 Domain/sub**	**D3 MK / DK / NK**	**E3 Level**	**F3 T-L method**	**G3 Assessment**	**H3 Assessment Type**	**I3 Term**	**K3 Integration**	**L3 Type**
Topic 1 Introduction to Research (LH :1 NLHT: 0 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO 1	Define Research and Research objectivesDescribe Scope of research in ayurveda. Define Evidence based and Integrative medicine	CC	MK	KH	L&PPT	T-OBT,QZ ,PUZ	S	II	-	LH
Non Lecture Hour Theory										
S.No	**Name of Activity**	**Description of Theory Activity**								
Non Lecture Hour Practical										
S.No	**Name of Practical**	**Description of Practical Activity**								
Topic 2 Historical developments in research (LH :0 NLHT: 1 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO 1,CO 5	Present historical development of Contemporary research.Identify evidences of research in ayurveda classical literature.	PSY-GUD	MK	KH	BS,L&GD,IBL ,TBL,DIS	M-CHT,QZ ,CL-PR,DEB	S	II	H-Samhita	NLHT2.1
Non Lecture Hour Theory										
S.No	**Name of Activity**	**Description of Theory Activity**								

NLHT 2.1	Historical developments in research	Students (5-10) are divided into groups (5-10) They are given task to collect evidences on milestones of researches conducted like Nazi camp, Thalidomide story, syphilis story and also collect evidences of research process in ayurveda classical texts. Later each group is given 5 minutes to present the collected literature and how the different issues were addressed in research methodology.

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity

Topic 3 Research Types (LH :2 NLHT: 2 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO 1,CO 2	Explain Primary and Secondary research and differentiate between them	CC	MK	KH	L&GD	T-OBT	S	II	-	LH
CO 1,CO 2	Explain Basic, Applied and Translational Research and differentiate among them.	CC	MK	K	L&PPT	T-OBT	S	II	-	LH
CO 1,CO 2	Define Qualitative, Quantitative and Mixed Research and differentiate among them	CC	MK	K	L&PPT	T-OBT	S	II	-	LH
CO 1,CO 2	Define Observational and Interventional studies and differentiate between them	CC	MK	K	L&GD	T-OBT	S	II	-	LH
CO 1,CO 2	Describe Descriptive and Analytical studies and differentiate between them	CC	MK	K	L&PPT	T-OBT	S	II	-	LH

CO 1,CO 2	Describe and differentiate between primary, secondary, descriptive and Analytical research studies.Explain and Differentiate between Basic, Applied and Translational Research	PSY-GUD	MK	KH	CBL,BS,PBL	PRN,S-LAQ	S	II	-	NLHT3.1
CO 1,CO 2	Illustrate and differentiate between Qualitative, Quantitative and Mixed ResearchDefine Observational and Interventional studies and differentiate between them	PSY-GUD	MK	KH	CBL,BS,PBL,DIS,PER	S-LAQ,CL-PR,PRN	S	II	-	NLHT3.2

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 3.1	Different Research types Part I	**Requirements:** A set of cards or case studies with short descriptions of various research studies (some primary, some secondary, some descriptive, some analytical, basic, applied, and translational research.) are archived and used for NHL. **1 hour Activity:** 1. Divide students into small groups. 2. Distribute the cards/cases randomly. 3. Ask each group to classify the research study given to them which may be either primary, secondary, descriptive, analytical, basic, applied and translational research. 4. After categorizing, the groups explain their reasoning behind the classification. 5. Then later teacher facilitates a discussion to clarify any misunderstandings and to reinforce key concepts
NLHT 3.2	Research Types Part II	**Requirements:** A set of case studies with short description or synopsis which have Qualitative, Quantitate, observational and interventional studies are archived and used as study material. **1 hour Activity:** 1. Divide students into small groups. 2. Distribute the cards/cases randomly.

		3. Ask each group to classify the research study given to them which may be either Qualitative, Quantitate, observational and interventional studies. 4. After categorizing, the groups explain their reasoning behind the classification. 5. Then later teacher facilitates a discussion to clarify any misunderstandings and to reinforce key concepts

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity

Topic 4 Research Ethics (LH :1 NLHT: 1 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO 5	Explain the need and significance of ethics in research.	AFT-VAL	MK	KH	L&GD, DIS	INT,CBA	S	II	-	LH
CO 5	Explain the role of IHEC/IEC and IAEC in research	AFT-VAL	DK	K	FC,BS, L&PPT	T-OBT,T-CS	S	II	-	LH
CO 5	Appraise the role and significance of ethics in publication	AFT-RES	MK	KH	BS,L& GD,DIS	T-CS,DEB, CL-PR	S	II	-	LH
CO 5	Explain the need and significance of ethics in research along with structure of Institutional Human and Animal ethical committee.	AFT-VAL	DK	KH	TBL,RP ,DIS,PB L,PSM	PRN,P-MOD,SBA	S	II	-	NLHT4.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 4.1	Ethics Committe Functioning	**1 hour Activity:** 1. Present a real or hypothetical case study involving ethical dilemmas in animal or human research.

		2. The scenario should focus on a situation where ethical approval is needed (e.g., using animals for a new study or involving human participants). 3. Divide participants into small groups (10 each group) and ask them to discuss the ethical challenges, the role of IAEC/IHEC in addressing these issues, and how they would resolve the situation. 4. Each group discusses and decides whether the research should be approved, ensuring the ethical principles (such as respect for autonomy, beneficence, non-maleficence, and justice) are considered.

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity

Topic 5 Research Designs and terminologies (LH :4 NLHT: 8 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO 1,CO 2	Describe Case Reports	CC	MK	KH	L&PPT	T-CS	S	II	-	LH
CO 1,CO 2	Explain Case series	CC	DK	K	L&PPT	T-CS,PA	S	II	-	LH
CO 1,CO 2	Describe Cross sectional study	CC	MK	K	L&PPT ,DIS	T-CS,QZ	S	II	-	LH
CO 1,CO 2	Explain COHORT study	CC	DK	K	DIS,BL, L&PPT	T-OBT,QZ	S	II	-	LH

CO 1,CO 2	Describe Case Control study	CC	DK	K	BS,L&P PT ,DIS	T-CS,PA	S	II	-	LH
CO 1,CO 2	Describe Randomized Controlled Trial	CC	MK	KH	DIS,PL, BS,L&P PT	T-CS,PA,S-LAQ	S	II	-	LH
CO 1,CO 2	Define and identify various steps of Literary research Narrative review, systematic review and meta-analysis and identify the difference among them	CC	NK	K	TBL,DI S,BS,L &PPT	PA,QZ ,CL-PR,T-CS	S	II	-	LH
CO 1,CO 2	Explain Various pre-clinical methods and their utility	CC	NK	K	D-M,BL ,L_VC, BS	QZ ,P-MOD,PA	S	II	-	LH
CO 1,CO 2	Define various terms related to research designs	CC	MK	KH	L&PPT ,DIS	PA,PUZ,Q Z ,T-CS	S	II	-	LH
CO 1,CO 2	Illustrate Literature review under peer learning.	CAP	MK	KH	TBL,BS ,PL,DIS	PA,T-CS,COM	S	II	-	NLHT5.1
CO 1,CO 2	Present differences between case report and case series.Describe and differentiate between cross sectional, longitudinal, cohort and case control studies.	PSY-GUD	MK	KH	TBL,PE R,PBL, BL	S-LAQ,PR N,CL-PR	S	II	-	NLHT5.2
CO 1,CO 2	Describe Randomized clinical trial and terminologies related to it (Randomization, matching, blinding and bias)	PSY-GUD	MK	KH	PBL,TB L,BL,B S,PL	COM,CL-P R,PRN,PA, P-MOD	S	II	-	NLHT5.3
CO 1,CO	Describe preclinical research methods (In-silico, In-vitro, In situ and In-vivo).	PSY-GUD	DK	K	D-M,PE R,PL,F	P-MOD,PA ,PRN	S	II	-	NLHT5.4

2					V						

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 5.1	Literary research	One hour peer learning for Literary research and review with different examples related to concepts of ayurveda.
NLHT 5.2	Research designs	**2-hour Group activity.** Preparation: Prepare a set of cards or slips with scenarios of different medical research questions (e.g., "Does smoking increase the risk of lung cancer?" or "What is the prevalence of hypertension in a population of 40-year-olds?"). Instructions: Divide the students into four-five small groups. Assign each group one study type (cross-sectional, longitudinal, cohort, or case-control). Each group will be given a set of research scenarios (with some overlapping between study types). Their task is to categorize each scenario into the correct study type based on the description. After 20 minutes, ask each group to present their study type and rationale for categorizing the research scenarios. **Debrief**: Clarify the key points for each study design, emphasizing differences such as the study direction (retrospective vs. prospective), timeframes, and data types (exposure vs. outcome). Discuss how the study design choice influences the type of questions they can answer (e.g., prevalence, incidence, risk factors).
NLHT 5.3	Randomized clinical trial and terminologies related to it	**2-hour group activity on Randomized control studies**. **Preparation**: Create a list of clinical questions (e.g., effectiveness of a new drug, surgical technique, or lifestyle intervention) that could be investigated via RCT. Divide students into small groups (4-5 students per group). Each group is assigned a clinical question and tasked with designing an RCT to answer it. **Steps**:

		• **Identify the Research Question**: What hypothesis are they testing? (e.g., "Does a new drug reduce blood pressure more effectively than the standard treatment?") • **Define the Population**: Who is the target population (e.g., adults with hypertension)? • **Randomization Strategy**: How will they randomize participants? Will it be simple randomization, block randomization, or stratified randomization? • **Intervention and Control Groups**: What will be in the intervention group (e.g., new drug) and the control group (e.g., standard treatment or placebo)? • **Blinding**: Will the study be single-blind, double-blind, or open-label? How will they ensure blinding to reduce bias? • **Outcome Measures**: What primary and secondary outcomes will they measure (e.g., blood pressure reduction, adverse effects)? • **Sample Size and Power**: How will they estimate sample size to ensure the study has adequate power? • **Ethical Considerations**: How will they handle patient consent, potential harms, and ethical concerns? • After **20 minutes** of discussion, each group presents their RCT design to the class (5 minutes per group). **Debrief**: Discuss strengths and weaknesses of the different designs, and facilitate a conversation about randomization, blinding, and potential biases.
NLHT 5.4	Preclinical methods in research	**3-hour field visit to orient on Preclinical methods in research**. Visit to Research laboratory or academic research institute with preclinical research facilities. After visiting all stations in research facility, bring the students together for a discussion led by a researcher or facilitator. Review each preclinical method and how they complement each other in research. Open the floor to questions about the different methods, their applications, challenges, and ethical considerations. Discuss any real-world case studies where these methods have led to breakthroughs in drug development or disease understanding. Ask students to reflect on which method they found most interesting or challenging and why

Non Lecture Hour Practical										
S.No	**Name of Practical**	**Description of Practical Activity**								
Topic 6 Research process (LH :3 NLHT: 6 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO 1,CO 2,CO 3	Describe the process for Selection of topic	CC	MK	KH	L&PPT ,BS,DIS	T-CS,PA	S	II	-	LH
CO 3	Access and explain the Literature search in medical database	PSY-MEC	MK	KH	FC,L& GD,BL	T-CS,CL-PR,PA	S	II	-	LH
CO 1,CO 2	Formulate the Hypothesis and Objectives	CC	MK	KH	DIS,BS, L&GD	PA,T-CS	S	II	-	LH
CO 1,CO 2	Select the appropriate materials and methodologies required in research process.	PSY-GUD	MK	KH	FC,L& GD,BL	QZ ,PA,S-LAQ,T-CS	S	II	-	LH
CO 2,CO 4	Explain collection, analysis and Interpretation of data.	CC	MK	K	BS,L& GD,DIS	T-CS,S-LAQ,QZ	S	II	-	LH
CO 2,CO 5	Justiy Research conclusions	CC	MK	K	FC,BL, L&GD	PA,T-CS	S	II	-	LH
CO 1,CO 2,CO	Discuss steps of Reporting of Research (IMRAD)	CAP	MK	KH	L&GD, DIS,BS	PA,CL-PR, S-LAQ,T-CS,QZ	S	II	-	LH

5										
CO 1,CO 2,CO 5	Identify the research topic, research problem and appraise review of literature.Formulate research hypothesis and objectives.	PSY-GUD	DK	SH	PBL,L&GD,PER,BS,DIS	CBA,CL-PR,S-LAQ,T-CS	S	II	-	NLHT6.1
CO 1,CO 2	Select the appropriate materials and methods for research study.	PSY-GUD	MK	SH	PBL,TBL,DIS,FC,L&GD	T-CS,PA,QZ , CL-PR,S-LAQ	S	II	-	NLHT6.2

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 6.1	Research process: Research question and Hypothesis	**Research topic, problem and hypothesis formulation (3-hour activity**) 1. Divide the students into four-five small groups. 2. Each group will brainstorm possible **research topics** in a medical field of their choice (Vatavyadhi, Madhumeha, Pandu, Bhadirya, srotas etc.) 3. Guide the students to ensure their chosen topic is relevant, specific, and manageable for undergraduate research. 4. Ask each group to define a research problem based on the topic they selected. 5. Example: If the topic is "prameha", the research problem might be, "What are the present day nidan ahara and vihara in causing prameha in urban areas?" 6. Give each group a sample abstract or a portion of a research paper (this can be a real article or a fictional example) or 7. Alternatively, ask the students to find a research article relevant to their topic using online databases. 8. Ask students to Identify key findings, methods, and conclusions from the literature. Assess the gaps or limitations in the existing research. Discuss how this literature review informs their own research problem.

		9. Guide the students to frame the research question and hypothesis for respective condition chosen by them from the above activity.
NLHT 6.2	Research process: Materials and Methodology	**Planning and conducting the research (3-hour activity)** Start with a brief discussion of the importance of selecting appropriate materials and methods in research. **Materials**: Refers to the tools, instruments, or resources required for the study (e.g., surveys, medical equipment, software). **Methods**: Refers to the overall approach to collecting and analysing data (e.g., qualitative vs. quantitative methods, observational studies, experimental designs). **Group Formation**: Divide students into groups of 4–6. **Research Topic and materials**: Each group selects or is assigned a general research topic (e.g., hypertension in children, antibiotic resistance in hospital settings, mental health in medical students) and Formulating a Research Problem. Depending on their chosen topic and problem ask the groups to decide on the materials they will need 1. Surveys and Questionnaires: Tools for collecting self-reported data. 2. Medical Equipment: Devices like blood pressure cuffs, thermometers, glucose meters. 3. Software: Statistical tools (SPSS, R, Excel) or qualitative analysis software (NVivo). 4. Data Sources: Databases, medical records, or patient registries. 5. Ethical Considerations: Ensure that the materials selected are ethically sound (e.g., consent forms, patient confidentiality). **Research design:** Ask each group to decide on the data collection methods that best suit their research problem. Guide the groups to choose between quantitative or qualitative methods based on their research problem and objectives. Study Population: Have the groups identify their target population and sampling method. Discuss factors like sample size, inclusion/exclusion criteria, and sampling bias. Data Analysis Approach: Ask the groups to select the statistical or qualitative analysis techniques they

		will use to interpret their data.

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity

Topic 7 Different Database, portals and Artificial Intelligence. (LH :1 NLHT: 3 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO 3	Illustrate use of different Research portals, database (DHARA, AYUSH Research Portal, PubMed, SCOPUS, UGC-CARE, Web of Science, etc) and explore Artificial Intelligence in research.	CC	MK	KH	L_VC,DIS	PA,S-LAQ,QZ	S	II	-	LH
CO 3	Demonstrate use of Research portals, database (DHARA, AYUSH Research Portal, PubMed, SCOPUS, UGC-CARE, Web of Science, etc) and Artificial intelligence in ayurveda	PSY-GUD	DK	KH	TBL,FC,L&GD,BS,W	QZ ,DOAP,PA,CL-PR	S	II	-	NLHT7.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 7.1	Demonstrate use of Research portals, database and Artificial intelligence in ayurveda	**Demonstration of Databases and Research Portals (2 hours)** • **PubMed**: Introduction to searching for medical literature, using MeSH (Medical Subject Headings) terms, and filters. • **Cochrane Library**: Discuss systematic reviews, meta-analyses, and evidence-based medicine. • **Google Scholar**: Overview of how to search academic articles and set up alerts for ongoing research. • **ClinicalTrials.gov**: Discuss how to access information about ongoing clinical trials and their results. **Demonstration of AI for Diagnostics (1 hour)**

		• **Show how AI** is being used to detect diseases from medical imaging or patient data (e.g., AI-assisted dermatology tools for skin cancer detection). • **Chatbots and Virtual Assistants**: Introduce AI-powered chatbots (e.g., **Babylon Health**, **Your.MD**) that provide preliminary diagnoses or health advice. Divide the students into small groups (3-4 students per group). Assign each group a research topic (e.g., "Antibiotic resistance in hospitals", "AI in diagnosing cancer", "Mental health in medical students"). Prepare a brief presentation (5-10 minutes) on what they found, the usefulness of the resources, and any challenges they encountered.

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity

Topic 8 Different Guidelines to report research (LH :0 NLHT: 2 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO 3	Differentiate various guidelines to report researchs like CARE, PRISMA, ARRIVE, CONSORT, STROBE.	CC	DK	KH	L_VC	CHK,QZ ,CL-PR,PA	S	II	-	LH
CO 3	Recommend specific guidlines for various research studies	PSY-GUD	DK	KH	BL,L_VC,FC,TBL,LS	S-LAQ,P-ID,CL-PR,PRN,CHK	S	II	-	NLHT8.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 8.1	Different Guidelines to report research	Introduce the different reporting guidelines, focusing on their purposes and key components (e.g.,

		CONSORT for clinical trials, STROBE for observational studies, PRISMA for systematic reviews, CARE for case reports). **Divide students into small groups (10-15 students per group).** 1. Assign each group a specific research study (either real or hypothetical) and provide them with the corresponding guideline checklist (e.g., CONSORT for clinical trial studies). 2. Ask the groups to review the study using the reporting guideline checklist, identifying elements of the research that are missing or not clearly reported. 3. Groups should note their findings on a whiteboard or in a shared document. 4. After the review, each group presents their findings, focusing on the areas where the study complied with the reporting guidelines and where it fell short. 5. Ask students to reflect on the activity and share any insights they gained about the importance of adhering to research reporting guidelines.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**

Topic 9 Intellectual Property Right (IPR)/Patent/ TKDL (LH :1 NLHT: 0 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO 3,CO 5	Explain importance and different aspects of Intellectual property Rights/Patents and TKDL	AFT-VAL	NK	KH	BS,L&GD,DIS,PBL	PRN,CL-PR,PA,QZ	S	II	-	LH

Non Lecture Hour Theory		
S.No	**Name of Activity**	**Description of Theory Activity**
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**

Topic 10 Research Critiquing (LH :1 NLHT: 2 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO 5	Explain Research critiquing and identify various steps involved in critiquing	CC	DK	K	L&PPT	CL-PR,T-CS,QZ	S	II	-	LH
CO 5	Illustrate Research critiquing and identify various steps involved in critiquing	PSY-GUD	DK	KH	FC,TBL,L&GD,BL,CBL	CL-PR,QZ,PRN	S	II	-	NLHT10.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 10.1	Research Critiquing	Select 3-4 research papers related to the topic at hand. Ensure these papers have a variety of strengths and weaknesses for discussion. Create critique sheets that participants can fill out for each study. Include questions like: What is the main research question or hypothesis, what are the key findings, what are the strengths of the study, what are the weaknesses or limitations of the study, how could the study be improved? Then divide participants into groups (ideally 10-15 people per group). If the group is large, you can have multiple sets of critique sheets and rotate the groups. Assign each group one research paper to start with. They'll spend 20-30 minutes reading the paper and completing the critique sheet. After 30 minutes, have each group rotate to the next research paper. They should review the critique sheet filled out by the previous group, read the paper again (or parts of it), and add any additional comments, thoughts, or suggestions. Repeat the process until each group has reviewed all the papers (1 hour). Final Reflection (30 minutes): Once the above activity is complete, come together as a whole group to discuss insights and the overall critiques. What were common strengths and weaknesses across the studies? How can these insights be applied to future research?

Non Lecture Hour Practical										
S.No	**Name of Practical**	**Description of Practical Activity**								
Topic 11 Introduction to Medical statistics (LH :1 NLHT: 1 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO 1	Define Statistics	CK	MK	K	DIS,L&PPT	Log book	S	II	-	LH
CO 1	Explain Objectives of Medical Statistics	CAP	MK	K	L&GD,L&PPT	Log book	S	II	-	LH
CO 1,CO 4	Differentiate between Descriptive and Inferential Statistics	CAP	MK	K	L&GD,PBL,TBL	Log book	S	II	-	LH
CO 1,CO 4	Explain Scope and Relevance of Medical Statistics in Ayurveda	CC	MK	K	L&GD,BS,L&PPT,TBL	Log book	S	II	-	LH
CO 1,CO 4	Differentiate between Descriptive and Inferential Statistics	CAP	MK	KH	FC,L&PPT	Log book	S	II	-	NLHT11.1
CO 1	Explain Evidence Based Medicine	CK	DK	K	FC,IBL,L&PPT	PRN,INT	S	II	-	LH
CO 1	Describe Integrative Medicine	CK	DK	K	FC,DIS,L&PPT	PRN	S	II	-	LH
Non Lecture Hour Theory										
S.No	**Name of Activity**	**Description of Theory Activity**								

NLHT 11.1	Differentiating descriptive and inferential statistics	Demonstration by teacher: Using a simple data set the teacher demonstrates and clarifies the concepts of descriptive and inferential statistics. Hands-on training: The students are grouped into three or four or more, with a maximum of 20 students in each group. Then, they are asked to collect basic information regarding each student in their respective groups, like name, native place, height, and weight, and record the details in writing. The teacher helps the students to summarize the data using descriptive statistics and infer from the collected information. The students are to present their findings in the class. Conclusion and summarization: The teacher then discusses the key aspects and provides inputs for further application of the concepts.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**

Topic 12 Data (LH :1 NLHT: 2 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO 1	Define Data	CK	MK	K	PBL,DIS,L&PPT	Log book	S	II	-	LH
CO 1,CO 4	Describe and classify different types of Data [Quantitative, Qualitative (categorical), Discrete and Continuous	CAP	MK	K	TBL,L&PPT,DIS,FC	Log book	S	II	-	LH
CO 1,CO 4	Define and classify different types of Scales: Ordinal, Nominal, Interval, Ratio	CAP	MK	K	PBL,L&PPT,DIS,IBL	Log book	S	II	-	LH
CO 1,CO	Demonstrate types and sets of Data	PSY-GUD	MK	SH	L&PPT,PBL,T	Log book	S	II	-	NLHT12.1

4					BL,DIS					

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 12.1	Data types and scales	Demonstration by teacher: Using a simple data set, the teacher demonstrates various data types and scales. Hands-on training: The students are grouped into three or four groups, with a maximum of 20 students in each group. The teacher then presents a data set that contains different types of data. The students are then allowed to discuss and determine the correct data types and scales for the given data. The activity is repeated with two, three, or more data sets. Conclusion and summarization: The teacher then discusses the key aspects of data classification and measuring scales.

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity

Topic 13 Basic statistical terms (LH :1 NLHT: 1 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO 1	Define Population with examples	CC	MK	K	L&PPT ,BS	Log book	S	II	-	LH
CO 1,CO 4	Define Sample and basic understanding of Sampling and sampling methods. Differentiate between Population and sample	CAP	MK	K	DIS,L& PPT ,T BL,PBL	Log book	S	II	-	LH
CO 1,CO 4	Define Variable and differentiate various types of variables	CAP	MK	K	TBL,IB L,L&PP T	Log book	S	II	-	LH
CO	Define Attributes and differentiate various types of attributes	CAP	MK	K	TBL,L	Log book	S	II	-	LH

1,CO 4					&PPT ,PBL					
CO 1,CO 4	Demonstrate Basic Statistical terms.	PSY-GUD	MK	SH	L&PPT ,D,TBL, DIS,PBL	Log book	S	II	-	NLHT13.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 13.1	Statistical terms	Demonstration by teacher: Using scientific articles the teacher identifies the population, sample, variables and attributes appearing in the study. Hands-on training: The students are grouped into three or four groups, with a maximum of 20 students in each group. The teacher gives two or three scientific articles to each group. The students in the groups discuss, identify, and record the population, sample, variables, and attributes appearing in each article and present the findings in class. Conclusion and summarization: The teacher then concludes and summarizes key aspects and provides additional inputs for improvisation.

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity

Topic 14 Collection and Presentation of Data (LH :2 NLHT: 4 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO 1,CO 4	Differentiate types of Data [Primary, Secondary] and understand basic data collection methods.	CAP	MK	K	TBL,PSM,FC,PBL	Log book	S	II	-	LH
CO	Demonstrate different types of Presentation of data (Textual,	PSY-	MK	SH	L&PPT	Log book	S	II	-	LH

1,CO 4	Tabular and Graphical)	MEC			,PSM,TBL,PBL,D					
CO 1,CO 4	Demonstrate Collection and Presentation of Data.	PSY-MEC	MK	SH	L&PPT,PBL,TBL,D	Log book	S	II	-	NLHT14.1
CO 1,CO 4	Demonstrate Collection and Presentation of Data.	PSY-MEC	MK	SH	PBL,D,TBL,PSM,L&PPT	Log book	S	II	-	NLHT14.2

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 14.1	Data collection	Demonstration by teacher: The teacher elaborates on practical aspects of data collection methods using various patient scenarios. Hands-on training: The students are grouped into three or four groups, with a maximum of 20 students in each group. Each group collects basic demographic, anthropometric, and clinical data of a minimum of 20 patients using specific data collection methods and records the data with the teacher's help within the allocated time. Conclusion and summarization: The teacher then concludes and summarizes the key aspects of data collection and their applicability in different scenarios.
NLHT 14.2	Data presentation	Demonstration by teacher: The teacher demonstrates various methods of data presentation, highlighting the key components. Hands-on training: The student groups summarize the data collected from activity 4.1 into tables and then to appropriate graphs. Each group then present the data to the class. Conclusion and summarization: The teacher then concludes and summarizes the key aspects of data presentation and important aspects to be considered while presenting the data.

Non Lecture Hour Practical										
S.No	**Name of Practical**	**Description of Practical Activity**								
Topic 15 Measures of Central Tendency (LH :1 NLHT: 2 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO 1,CO 4	Define Measures of Central Tendency and Arithmetic Mean.	CC	MK	KH	TBL,L &PPT , PBL,FC ,PSM	Log book	S	II	-	LH
CO 1,CO 4	Define Mean	CC	MK	KH	DIS,PB L,L&PP T	Log book	S	II	-	LH
CO 1,CO 4	Define Median	CC	MK	KH	L&PPT ,PSM,P BL	Log book	S	II	-	LH
CO 1,CO 4	Define Mode	CC	MK	KH	L&PPT ,PBL,PS M	Log book	S	II	-	LH
CO 1,CO 4	Explain the Qualities of Good measure of tendency	CC	MK	KH	L&GD, L&PPT ,TBL	Log book	S	II	-	LH
CO 1,CO 4	Calculate Measures of Central Tendency.	PSY-GUD	MK	SH	L&PPT ,DIS,PS M,TBL, PBL	Log book	S	II	-	NLHT15.1
Non Lecture Hour Theory										

S.No	Name of Activity	Description of Theory Activity
NLHT 15.1	Calculating measures of central tendency	Demonstration by teacher: Using specific data sets the teacher demonstrates how to calculate mean, median and mode from the given data. Hands-on training: The students are given three or four data sets to calculate different measures of central tendency from the data. Conclusion and summarization: The teacher discusses the importance and applicability of various measures of central tendency and describes a good measure of central tendency.

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity

Topic 16 Measures of Deviation/Dispersion/Variability (LH :1 NLHT: 4 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO 1,CO 4	Define Measures of Deviation/ Dispersion / Variability and Range.	CC	MK	KH	TBL,L &PPT , PSM,DI S,PBL	Log book	S	II	-	LH
CO 1,CO 4	Define Quartile deviation.	CC	MK	KH	L&PPT ,DIS,TB L,PBL, PSM	Log book	S	II	-	LH
CO 1,CO 4	Define Mean deviation.	CC	MK	KH	DIS,PB L,TBL, PSM,L &PPT	Log book	S	II	-	LH
CO 1,CO	Define Standard deviation.	CC	MK	KH	PBL,DI S,L&PP	Log book	S	II	-	LH

4					T ,TBL, PSM					
CO 1,CO 4	Define Variance and Co-efficient of Variation.	CC	MK	KH	TBL,L &PPT , DIS,PB L	Log book	S	II	-	LH
CO 1,CO 4	Define Standard Error	CC	NK	KH	PBL,L& PPT ,PS M,TBL	Log book	S	II	-	LH
CO 1,CO 4	Explain the Qualities of Good measure of variability	CC	MK	KH	TBL,L &PPT , PSM,PB L,DIS	Log book	S	II	-	LH
CO 1,CO 4	Calculate Measures of Deviation / Dispersion / Variability.	PSY-GUD	MK	SH	D,TBL, L&PPT ,BS,PB L	Log book	S	II	-	NLHT16.1
CO 1,CO 4	Calculate Measures of Deviation / Dispersion / Variability.	PSY-GUD	MK	SH	L&PPT ,D,PSM, PBL,TB L	Log book	S	II	-	NLHT16.2

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 16.1	Calculating measures of central tendency - 01	Demonstration by teacher: Using specific data sets the teacher demonstrates how to calculate range, mean deviation and standard deviation from the given data. Hands-on training: The students are given three or four data sets to calculate the Range, Mean Deviation, and standard deviation from the data. Conclusion and summarization: The teacher discusses

		the data sets and explains the difference between range, mean deviation, and standard deviation.
NLHT 16.2	Calculating measures of central tendency - 02	Demonstration by teacher: Using the same data sets from activity 6.1 the teacher demonstrates how to calculate variance and coefficient variation from the given data. Hands-on training: The students are then given three or four data sets to calculate variance and coefficient variation from the data. Conclusion and summarization: The teacher discusses the data sets and explains variance and coefficient of variation and their applicability. Further, the teacher elaborates on good measures of dispersion.

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity

Topic 17 Probability (LH :1 NLHT: 3 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO 1	Explain Probability	CC	MK	K	D-M,PL ,L&PPT ,IBL	Log book	S	II	-	LH
CO 1,CO 4	Define Normal Distribution Curve and understand its variations	CC	MK	KH	PL,L&P PT ,DIS ,BS,ML	Log book	S	II	-	LH
CO 1,CO 4	Calculate Probability and Normal Distribution.	PSY-GUD	MK	SH	DIS,D,L &PPT ,I BL,PBL	Log book	S	II	-	NLHT17.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 17.1	Normal distribution and probability	Demonstration by teacher: The teacher demonstrates the normal distribution curve and its variations,

		like skewness and kurtosis, using different data. The teacher also demonstrates probability based on the normal distribution. Hands on training: The students are given tabulated data to develop normal distribution curves. Then, they conduct probability predictions from the curve. Conclusion and summarization: The teacher discusses the findings and clarifies doubts.

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity

Topic 18 Hypothesis and Test of Significance (LH :1 NLHT: 3 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO 1,CO 4	Explain Hypothesis	CC	MK	K	L&PPT ,DIS	Log book	S	II	-	LH
CO 1,CO 4	Explain Test of significance	CC	MK	KH	BS,DIS, L&GD	Log book	S	II	-	LH
CO 1,CO 4	Discuss Hypothesis and Test of Significance.	CAP	MK	SH	L&PPT ,PSM,TBL,PBL ,D	Log book	S	II	-	NLHT18.1
CO 1,CO 4	Discuss Hypothesis and Test of Significance.	CAP	MK	SH	D,L&PPT ,TBL, DIS	Log book	S	II	-	NLHT18.2

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity

NLHT 18.1	Hypothesis	Demonstration by teacher: The teacher demonstrates systematic development of a hypothesis from a research problem. Hands-on training: The students are grouped into three or four groups, with a maximum of 20 students in each group. Each group develop hypotheses from three or four given research problems. Then, they present the hypotheses in class. Conclusion and summarization: The teacher discusses various hypotheses developed by the groups and summarizes the critical aspects.
NLHT 18.2	Testing of significance	Demonstration by teacher: The teacher demonstrates the steps involved in testing a hypothesis using data from different scientific articles. Hands-on training: The students' groups are then given three or four articles to identify and record the steps of hypothesis testing in them. Then, they will present the data in class. Conclusion and summarization: The teacher concludes with significant points regarding the testing of the hypothesis.

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity

Topic 19 Parametric and non-parametric tests (LH :1 NLHT: 2 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO 1,CO 4	Explain and differentiate Parametric and Non-parametric tests with examples	CC	MK	KH	L&GD, L&PPT ,BS	Log book	S	II	-	LH
CO 1,CO 4	Discuss Parametric and Non-parametric tests	CAP	MK	KH	D,PBL, L&PPT ,DIS	Log book	S	II	-	NLHT19.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 19.1	Understanding Parametric and Non-parametric tests	Demonstration by teacher: The teacher demonstrates the difference between parametric and nonparametric tests and introduces various parametric and nonparametric tests. Hands-on training: The teacher provides three or four scientific articles to the students in groups. The students discuss and understand the application of parametric or nonparametric tests, and they record their findings. Conclusion and summarization: The teacher concludes with major points regarding the applicability of parametric and nonparametric tests.

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity

Topic 20 Concept of Co-relation and Regression (LH :1 NLHT: 1 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO 1,CO 4	Explain Correlation and Regression	CC	MK	KH	L&PPT ,D,PBL	Log book	S	II	-	LH
CO 1,CO 4	Correlation and regression	CC	DK	KH	TBL,L &PPT ,D	Log book	S	II	-	NLHT20.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 20.1	Undersanding correlation and regression	Demonstration by teacher: The teacher demonstrates various features of correlation and regression using data from scientific literature. Hands-on training: Students are given three data sets that utilize correlation and regression, and they understand various scenarios for their application.

		Conclusion and summarization: The teacher concludes with major points regarding correlation and regression and their applicability.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**

Topic 21 Commonly used Statistically software (LH :0 NLHT: 2 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO 1,CO 4	Demonstrate different Software used for Statistical Analysis	CC	NK	KH	D,DIS,TUT,L&PPT	Log book	S	II	-	NLHT21.1

Non Lecture Hour Theory		
S.No	**Name of Activity**	**Description of Theory Activity**
NLHT 21.1	Statistical software	Demonstration by teacher: The teacher introduces various statistical software and its features and demonstrates any of them by performing some simple statistical tests. Hands-on training: Students are allowed to review various statistical software, understand its features, and prepare a note. Conclusion and summarization: The teacher concludes with major points regarding statistical software and their applicability.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**

Table 4 : NLHT Activity

(*Refer table 3 of similar activity number)

Activity No*	CO No	Activity details
2.1	CO 1,CO 5	Historical developments in research
3.1	CO 1,CO 2	Different Research types Part I
3.2	CO 1,CO 2	Research Types Part II
4.1	CO 5	Ethics Committe Functioning
5.1	CO 1,CO 2	Literary research
5.2	CO 1,CO 2	Research designs
5.3	CO 1,CO 2	Randomized clinical trial and terminologies related to it
5.4	CO 1,CO 2	Preclinical methods in research
6.1	CO 1,CO 2,CO 5	Research process: Research question and Hypothesis
6.2	CO 1,CO 2	Research process: Materials and Methodology
7.1	CO 3	Demonstrate use of Research portals, database and Artificial intelligence in ayurveda
8.1	CO 3	Different Guidelines to report research
10.1	CO 5	Research Critiquing
11.1	CO 1,CO 4	Differentiating descriptive and inferential statistics
12.1	CO 1,CO 4	Data types and scales
13.1	CO 1,CO 4	Statistical terms
14.1	CO 1,CO 4	Data presentation

14.2	CO 1,CO 4	Data collection
15.1	CO 1,CO 4	Calculating measures of central tendency
16.1	CO 1,CO 4	Calculating measures of central tendency - 01
16.2	CO 1,CO 4	Calculating measures of central tendency - 02
17.1	CO 1,CO 4	Normal distribution and probability
18.1	CO 1,CO 4	Hypothesis
18.2	CO 1,CO 4	Testing of significance
19.1	CO 1,CO 4	Understanding Parametric and Non-parametric tests
20.1	CO 1,CO 4	Undersanding correlation and regression
21.1	CO 1,CO 4	Statistical software

Table 5 : List of Practicals

Not Applicable

Table 6 : Assessment Summary: Assessment is subdivided in A to H points

6 A : Number of Papers and Marks Distribution

Subject Code	Papers	Theory	Practical/Clinical Assessment (-)					Grand Total
			Practical	Viva	Elective	IA	Sub Total	
AyUG-RM	1	50	-	-	-	-	-	50

6 B : Scheme of Assessment (Formative and Summative)

PROFESSIONAL COURSE	FORMATIVE ASSESSMENT			SUMMATIVE ASSESSMENT
	First Term (1-6 Months)	Second Term (7-12 Months)	Third Term (13-18 Months)	
Third	NA	NA	NA	**UE****

PA: Periodical Assessment; **TT:** Term Test; **UE:** University Examinations; **NA:** Not Applicable.
****University Examination shall be on entire syllabus

6 C : Calculation Method for Internal assessment Marks

Not applicable

6 D : Evaluation Methods for Periodical Assessment

S. No.	Evaluation Methods
1.	Practical / Clinical Performance
2.	Viva Voce, MCQs, MEQ (Modified Essay Questions/Structured Questions)
3.	Open Book Test (Problem Based)
4.	Summary Writing (Research Papers/ Samhitas)
5.	Class Presentations; Work Book Maintenance
6.	Problem Based Assignment
7.	Objective Structured Clinical Examination (OSCE), Objective Structured Practical Examination (OPSE), Mini Clinical Evaluation Exercise (Mini-CEX), Direct Observation of Procedures (DOP), Case Based Discussion (CBD)
8.	Extra-curricular Activities, (Social Work, Public Awareness, Surveillance Activities, Sports or Other Activities which may be decided by the department).
9.	Small Project
10.	Activities Indicated in Table 3 - Column G3 as per Indicated I, II or III term in column I3.

6 E : Question Paper Pattern

III PROFESSIONAL BAMS EXAMINATIONS
AyUG-RM
PAPER-I
Time: 1.5 Hours Maximum Marks: 50
INSTRUCTIONS: All questions compulsory

		Number of Questions	**Marks per question**	**Total Marks**
Q 1	MULTIPLE CHOICE QUESTIONS (MCQ)	10	1	10
Q 2	SHORT ANSWER QUESTIONS (SAQ)	4	5	20
Q 3	LONG ANSWER QUESTIONS (LAQ)	2	10	20
				50

6 F : Distribution of theory examination

Paper 1 (RM-MS)					
Sr. No	**A List of Topics**	**B Marks**	**MCQ**	**SAQ**	**LAQ**
1	**Introduction to Research**	30	No	Yes	No
2	**Historical developments in research**		No	Yes	No
3	**Research Types**		Yes	Yes	Yes
4	**Research Ethics**		Yes	Yes	No
5	**Research Designs and terminologies**		Yes	No	Yes
6	**Research process**		Yes	No	Yes
7	**Different Database, portals and Artificial Intelligence.**		Yes	Yes	No
8	**Different Guidelines to report research**		Yes	Yes	No
9	**Intellectual Property Right (IPR)/Patent/ TKDL**		Yes	No	No
10	**Research Critiquing**		Yes	No	No
11	**Introduction to Medical statistics**	20	Yes	No	No
12	**Data**		Yes	No	No
13	**Basic statistical terms**		Yes	No	No
14	**Collection and Presentation of Data**		Yes	Yes	Yes
15	**Measures of Central Tendency**		No	No	Yes
16	**Measures of Deviation/Dispersion/Variability**		No	No	Yes
17	**Probability**		No	Yes	No
18	**Hypothesis and Test of Significance**		Yes	No	No
19	**Parametric and non-parametric tests**		Yes	Yes	No
20	**Concept of Co-relation and Regression**		Yes	No	No
21	**Commonly used Statistically software**		Yes	No	No
Total Marks		**50**			

6 G : Instructions for UG Paper Setting & Blue print

1. All questions shall be compulsory.
2. Questions shall be drawn based on Table 6F, which provides the topic name, types of questions (MCQ(Multiple Choice Question), SAQ(Short Answer Question), LAQ(Long Answer Question)).
3. The marks assigned in Table 6F for each topic/group of topics shall be considered as the maximum allowable marks for that topic/group of topics.
4. Ensure that the total marks allocated per topic/group of topics do not exceed the limits specified in Table 6F.
5. Refer to Table 6F before setting the questions. Questions shall be framed only from topics where the type is marked as “YES”, and avoided if marked as “NO”.
6. Each 50-mark question paper of AyUG-RM shall contain:
   - 10 MCQs (5 Research Methodology + 5 Statistics)
   - 4 SAQs (3 Research Methodology + 1 Statistics)
   - 2 LAQs (1 Research Methodology + 1 Statistics)
7. MCQs:
   - Majority shall be drawn from the Must to Know part of the syllabus.
   - Questions from the Desirable to Know part of syllabus shall not exceed 2 for AyUG-RM.
   - Questions from the Nice to Know part of syllabus shall not exceed 1 for AyUG-RM.
8. SAQs:
   - Majority shall be drawn from the Must to Know part of the syllabus.
   - Questions from the Desirable to Know part of syllabus shall not exceed 1.
   - No questions shall be drawn from the Nice to Know part of syllabus.
   - SAQs shall assess understanding, application, and analysis, rather than simple recall.
9. LAQs:
   - All LAQs shall be drawn exclusively from the Must to Know part of the syllabus.
   - No questions shall be taken from the Desirable to Know or Nice to Know part of the syllabus.
10. Long Answer Questions shall be structured to assess higher cognitive abilities, such as application, analysis, and synthesis.
11. Follow the guidelines in User Manual III for framing MCQs, SAQs, and LAQs.

6 H : Distribution of Practical Exam

Not Applicable

References Books/ Resources

S.No	Resources
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Abbreviations

Domain		T L Method		Level		Assessment		Integration	
CK	Cognitive/Knowledge	L	Lecture	K	Know	T-CS	Theory case study	V-RS	V RS
CC	Cognitive/Comprehension	L&PPT	Lecture with PowerPoint presentation	KH	Knows how	T-OBT	Theory open book test	V-KS	V KS
CAP	Cognitive/Application	L&GD	Lecture & Group Discussion	SH	Shows how	P-VIVA	Practical Viva	H-KC	H KC
CAN	Cognitive/Analysis	L_VC	Lecture with Video clips	D	Does	P-REC	Practical Recitation	H-SH	H SH
CS	Cognitive/Synthesis	REC	Recitation			P-EXAM	Practical exam	H-PK	H PK
CE	Cognitive/Evaluation	SY	Symposium			PRN	Presentation	H-SHL	H SHL
PSY-SET	Psychomotor/Set	TUT	Tutorial			P-PRF	Practical Performance	H-SP	H SP
PSY-GUD	Psychomotor/Guided response	DIS	Discussions			P-SUR	Practical Survey	H-KB	H-KB
PSY-MEC	Psychomotor/Mechanism	BS	Brainstorming			P-EN	Practical enact	H-Samhita	H-Samhita
PSY-ADT	Psychomotor Adaptation	IBL	Inquiry-Based Learning			P-RP	Practical Role play	V-DG	V DG
PSY-ORG	Psychomotor/Origination	PBL	Problem-Based Learning			P-MOD	Practical Model	V-RN	V RN
AFT-REC	Affective/ Receiving	CBL	Case-Based Learning			P-POS	Practical Poster	V-RS	V RS
AFT-RES	Affective/Responding	PrBL	Project-Based Learning			P-CASE	Practical Case taking	V-AT	V AT
AFT-VAL	Affective/Valuing	TBL	Team-Based Learning			P-ID	Practical identification	V-SW	V SW
AFT-SET	Affective/Organization	TPW	Team Project Work			P-PS	Practical Problem solving		
AFT-CHR	Affective/ characterization	FC	Flipped Classroom			QZ	Quiz		
PSY-PER	Psychomotor/perception	BL	Blended Learning			PUZ	Puzzles		
PSY-COR	Psychomotor/ Complex Overt Response	EDU	Edutainment			CL-PR	Class Presentation		
		ML	Mobile Learning			DEB	Debate		
		ECE	Early Clinical Exposure			WP	Word puzzle		
		SIM	Simulation			O-QZ	Online quiz		
		RP	Role Plays			O-GAME	Online game-based assessment		
		SDL	Self-directed learning			M-MOD	Making of Model		
		PSM	Problem-Solving Method			M-CHT	Making of Charts		
		KL	Kinaesthetic Learning			M-POS	Making of Posters		

		W	Workshops			C-INT	Conducting interview		
		GBL	Game-Based Learning			INT	Interactions		
		LS	Library Session			CR-RED	Critical reading papers		
		PL	Peer Learning			CR-W	Creativity Writing		
		RLE	Real-Life Experience			C-VC	Clinical video cases		
		PER	Presentations			SP	Simulated patients		
		D-M	Demonstration on Model			PM	Patient management problems		
		PT	Practical			CHK	Checklists		
		X-Ray	X-ray Identification			Mini-CEX	Mini-CEX		
		CD	Case Diagnosis			DOPS	DOPS		
		LRI	Lab Report Interpretation			CWS	CWS		
		DA	Drug Analysis			RS	Rating scales		
		D	Demonstration			RK	Record keeping		
		D-BED	Demonstration Bedside			COM	Compilations		
		DL	Demonstration Lab			Portfolios	Portfolios		
		DG	Demonstration Garden			Log book	Log book		
		FV	Field Visit			TR	Trainers report		
						SA	Self-assessment		
						PA	Peer assessment		
						360D	360-degree evaluation		
						PP-Practical	Practical		
						VV-Viva	Viva		
						DOAP	Demonstration Observation Assistance Performance		
						SBA	Scenario Based Assessment		
						CBA	Case based Assessment		
						S-LAQ	Structured LAQ		
						OSCE	Observed Structured Clinical Examination		
						OSPE	Observed Structured Practical Examination		
						DOPS	Direct observation of procedural skills		

SHISHIKSHA (शिशिक्षा)

(Bench to Bedside)

An Uniform Manual for Internship Orientation Program

PRESCRIBED BY NCISM

(Applicable until further notification)



ncism

।। आयुषे सर्वलोकानाम्।।

BOARD OF AYURVEDA,

NATIONAL COMMISSION FOR INDIAN SYSTEM OF MEDICINE

NEW DELHI-110026

SHISHIKSHA (शिशिक्षा)

(Bench to Bedside)

Manual for Internship Orientation Programme

INTRODUCTION- This programme is intended for UG (BAMS) students entering the compulsory rotatory internship. Orientation designed as uniform module by NCISM. The internship phase is a critical component of medical training, where newly graduated doctors get transition from academic learning to hands-on clinical practice. This period allows interns to apply their theoretical knowledge under expert supervision, thereby acquiring essential skills to function independently as competent healthcare professionals. To facilitate this transition, an Internship Orientation Program is conducted as per regulation (15) (f) of National Commission for Indian System of Medicine (Minimum Standards of Undergraduate Ayurveda Education) Regulations-2022, which is serving as an introductory initiative to familiarize fresh interns with the clinical environment and their roles within the healthcare system. The Internship Orientation program aims to enhance their clinical competencies, communication skills, and professional attitudes, ensuring they are well-prepared to meet the challenges in practice of ASUS system of medicine.

By participating in this orientation, interns gain confidence and a clear understanding of their responsibilities, effectively bridging the gap between their medical education and professional practice. This structured program is instrumental in shaping them into skilled and ethical practitioners, ready to contribute meaningfully to patient care and the medical community.

- It shall be responsibility of the teaching institution to conduct Orientation before commencement of the internship.
- The Interns shall mandatorily attend Orientation program.
- **Duration**: Six-days Orientation of 42 hours (everyday 7 hours)
- The uniform Orientation module handbook is aligned with regulation 15 of MSE-2022.
- This module serves as NCISM prescribed manual for all Ayurveda colleges to follow during internship orientation.
- **Mode of teaching and Learning methodology:** Lectures, Audio-visual classes, demonstrations, hospital rounds etc.
- **Monitoring:** Attendance of internees is mandatory and E-logbook to be maintained as per regulation.
- According to convenience and as per availability of concerned resource person the session topics may be altered, provided all the prescribed points must be covered as scheduled.

OBJECTIVES-

1. To acquaint the fresh interns about hospital policies and goals.
2. To enhance their diagnostic and therapeutic skills required for effective patient care.
3. To provide the requisite knowledge about the Medical Records, Medical Insurance, Medical Certification and pharmacovigilance.
4. To provide hands-on training in the Hospital Information Management System (HIMS), ensuring interns are proficient in managing patient data and hospital resources efficiently.
5. To make familiar with Medico legal aspects and ethics, knowledge of National and state Health care policies and NABH standards.
6. To cultivate empathy, professional communication skills, appropriate conduct, and medical etiquette.
7. To familiarize interns with entrepreneurial opportunities and encourage an entrepreneurial mindset.

CURRICULUM

1st Day - Introduction, Hospital Orientation & Professional Readiness:				**07Hrs**
Sl. No	**Content**	**Hrs.**	**Proposed expected outcomes at the end of this Orientation programme, *(as well as at the end of complete one year internship where an intern should be aware of)***	**Resource person**
	Inaugural Function: ❖ **Pretest-** a) Pre-test to be conducted before commencement of orientation. b) The questions shall be within the framework of the Internship. c) The questionnaire should include 30 questions. d) Google forms or any other suitable tools may be used.	01 hr	Baseline Competency Assessment (Pre-Test) • The pre-test will assess interns' knowledge of core Ayurveda and basic clinical skills before starting hospital postings. • This helps institutions identify learning gaps and plan remedial sessions.	Intern coordinator /DMS
Session-1				
01	❖ **General rules, regulation and Leave policies** ❖ **Code of conduct** ❖ **Provisional Registration procedure** ❖ **OPD / IPD duties and responsibilities** **Departmental Duty Postings** a) The interns should be oriented with general rules and regulations of the hospital, their code of conduct and responsibilities during postings. b) Duration of posting in different departments as per schedule of internship adopted by the hospital.	2 hr	• To develop into disciplined, ethically responsible, clinically competent Ayurveda physicians, aligned with NCISM standards of functionality of institute and hospital. • To be familiar with hospital and system duty protocols, hospital administration	Intern coordinator / DMS
Session-2				
02	**Awareness & Orientation of NABH standards updated for Ayurveda Hospitals** a) Basic knowledge of NABH standards b) Patient centered NABH Standards	1hrs	• To get acquainted with NABH standards. • To Aware on orientation of NABH standard updated for ayurvedic hospitals, give overall brief expected outcome. • To get Aware on NABH standards will ensure that Ayurveda hospitals function with enhanced patient safety, quality assurance, ethical governance, and standardized clinical protocols, thereby preparing interns to deliver healthcare at par with national and global benchmarks.	NABH coordinator /Assessor/ Resource person

Session-3				
03	❖ **Biomedical waste disposal** ❖ **Hospital infection Control** ❖ **Patient safety Goals** a) Hands on training of collection, segregation and disposal of BMW (Interns may be divided into three groups and conduct the activities parallel and by swapping the batches) b) Hands on training of Hand washing techniques, Gloving, Spill management ❖ Mock drill of different codes of NABH	1 hrs	• To get acquainted with hospital protocols. • To develop competence in safe clinical practice, ensuring that Ayurvedic hospitals meet national standards of biomedical waste management, infection control, and patient safety, thereby protecting patients, staff, and environment.	MS/DMS/ Resource person
Session-4				
04	**Capacity Building and Personality development (any 2)** a) Self-learning, collaborative learning, lifelong learning strategies b) Communication skills, critical thinking, soft skills, empathy and respecting conduct, confidence and personal growth, public speaking, Patient Interaction, Bedside Manners etc.	01 hrs	• To get acquainted with clinical skills and communication. • To evolve into competent, ethical, and confident Ayurveda professionals capable of delivering quality healthcare and assuming leadership roles in clinical and community settings.	Resource person/Faculty
Session-5				
05	**Medical Records department (MRD) and documentation standards:** a) Introduction to MRD and its importance in patient care b) Types of records: OPD slips, IPD files, lab reports, consent forms, birth/death certificates, and discharge summaries. c) Record maintenance and retrieval protocols.	1 hrs	• To familiarize interns with systematic documentation practices in clinical settings. • To make interns understand the role of MRD in NABH accreditation and medico-legal compliance. • To enable interns to appreciate the value of accurate, timely, and ethical record-keeping	DMS /RMO

2nd Day: Kayachikitsa, Panchakarma & Clinical Records - 07Hrs

Sl. No	Content	Hrs.	Proposed expected outcomes at the end of this Orientation, (*as well as at the end of complete one year internship where an intern should be aware of)*	Resource person
		Session-1		
01	**Kayachikitsa (Internal Medicine)** ❖ **OPD card & IPD notes writing** a) The essential contents include - Detailed examination of the concerned system related to chief complaint, Grading, scoring and	02 hrs	*(i) all routine works such as case taking, investigations, diagnosis and management of common diseases by Ayurvedic medicine;* *(ii) routine clinical pathological work*	

	diagrammatical representation of the symptoms present. b) Essential contents of prescription – Order of ASUS medicines, Medication Name, Dosage Form, Anupana (Vehicle), Dosage, Frequency, Route of Administration, Duration, Prescriber's Signature, Other Instructions: Pathya, Apathya. (Food and lifestyle – Compatible and non-compatible) ❖ Discharge card writing a) Hands on training on prescription writing by giving a certain clinical scenario specific to the department. b) Writing of Patient progress note and discharge summary. ❖ Mock drill of emergency condition like shock etc. ❖ (Unavailability of instrument may hinder hands on training so we need to explain how they gonna hand train for each specific op and ip)		*such as hemoglobin estimation, complete haemogram, urine analysis, microscopic examination of blood parasites, sputum examination, stool examination, Mutra evam Mala pariksha by Ayurvedic method, interpretation of laboratory data and clinical findings and arriving at a diagnosis and all pathological and radiological investigational useful for monitoring the deterioration of different disease conditions;* (iii) *training in routine ward procedures and supervision of patients in respect of their diet, habits and verification of medicine schedule.*	HOD /Faculty
Session-2				
02	**Panchakarma** OPD card & IPD notes writing a) Therapy Notes – Name of therapy, Type of medication, Application method, Duration and Observation. b) Detailed examination of the concerned system related to chief complaint, Grading, scoring and diagrammatical representation of the symptoms present. c) Prescription writing d) Daily assessment and observation notes on IPD case paper e) Documentation (recording of Registers) f) Scheduling of Appointments of Procedures ❖ The interns should be made familiar with the appointment schedule of different therapeutic procedures. ❖ Hands on training/Demonstration of various procedures like snehan, swedan and various types of Basti etc. (Procedure writing)	02 hrs	*(i) Panchakarma & Upakarma procedures and techniques regarding Purva Karma, Pradhan Karma and Pashchat Karma;* *(ii) management of procedural complications, counselling of patients for procedures, maintenance of therapy rooms etc.*	HOD /Faculty
Session-3				
03	**Pharmacy & Pharmaco-vigilance –** ❖ Introduction to Hospital/College Pharmacy ❖ Dispensing Practices: Classical formulations (churna, ghrita, taila, avaleha, asava-arishta, vati/gutika), Proprietary medicines, SOPs for OPD and IPD supply, Label interpretation (drug name, composition, dose, anupana, expiry date, batch number)	01 hrs	• To understand the functioning of pharmacy unit within an Ayurveda hospital. • To gain hands-on knowledge of dispensing, labeling, and storage practices. Be able to counsel patients confidently about medicine use and safety.	HOD /Faculty

	❖ Observation of untoward events ❖ Documentation and reporting of ADR a) Demonstration of case record form of ADR. Knowledge of Right Dose, time of administration and duration of the formulations		• To appreciate the importance of quality control and documentation in pharmacy practice	
Session-4				
04	**Laboratory** – ❖ Data Documentation ❖ Sample Collection, Storage and Transport ❖ Hands on training on instrumentation ❖ Laboratory etiquettes - Hands on training on blood sample collection techniques, handling of equipments. ❖ Disposal of samples after testing.	01 Hrs	• To increase the efficiency of best current evidence for application into clinical practice and reduce the burden of decision making. • To prepare interns to utilize diagnostic investigations responsibly, maintain safety and accuracy, and integrate laboratory evidence with Ayurvedic clinical judgment, thereby improving the quality of patient care.	HOD – Roganidana /Resource person
Session-5				
05	**Communication leadership and counselling:** ❖ Patient counselling ❖ Cultural sensitivity ❖ Compassionate approach ❖ Team work	1 hrs	• To become Expert in history taking, examination Empathy and belief in team work. • Interns will emerge as effective communicators, responsible leaders, and empathetic counselors, aligning with NCISM's vision of producing competent Ayurveda physicians with strong professional and ethical values.	Resource person

3rd – Day: Shalya, Shalakya & Medico-Legal Orientation - 07Hrs

Sl. No	Content	Hrs	Proposed expected outcomes at the end of this Orientation, (*as well as at the end of complete one year internship where an intern should be aware of)*	Resource person
Session-1				
01	**Shalya tantra - Surgery** ❖ OPD card & IPD notes writing ❖ Detailed examination of the concerned system related to chief complaint, Grading, scoring and diagrammatical representation of the symptoms present. ❖ Prescription writing specific to surgery department ❖ OT etiquettes ❖ Discharge card writing a) Hands on training on writing notes of surgery by giving a certain clinical/ Surgical scenario. b) Writing of Patient progress note and discharge summary. Hands on training of OT etiquettes and various	2 hrs	*(i) clinical examination, Diagnosis and Management of common surgical disorders according to Ayurvedic principles;* *(ii) management of certain surgical emergencies such as fractures and dislocations, acute abdomen;* *(iii) practical training of aseptic and antiseptics techniques, sterilization;* *(iv) intern shall be involved in pre-operative and post-operative managements;* *(v) practical use of local anesthetic techniques and use of anesthetic drugs;*	HOD /Faculty

	procedures performed in surgery department.		*(vi) radiological procedures, clinical interpretation of X-ray, Intra Venous Pyelogram, Barium meal, Sonography and Electro Cardio Gram;* *(vii) surgical procedures and routine ward techniques such as- (a) suturing of fresh injuries; (b) dressing of wounds, burns, ulcers and similar ailments; (c) incision and drainage of abscesses; (d) excision of cysts; (e) venesection; (f) application of Ksharasutra in ano-rectal diseases; and (g) rakthamokshana, Agnikarma, Ksharakarma.*	
Session-2				
02	**Shalakyatantra** Hands on training on application of instruments. ❖ Kriyakalpa unit management ❖ OPD card & IPD notes writing ❖ Detailed examination of the concerned system related to chief complaint, Grading, scoring and diagrammatical representation of the symptoms present. ❖ Prescription writing specific to Shalakya department ❖ Discharge card writing a) Hands on training on clinical examination and writing notes of Eye and ENT surgery by giving a certain clinical/ Surgical scenario. b) Writing of Patient progress note and discharge summary. Hands on training of Kriyakalpa (procedures) performed in Eye and ENT department.	2 hrs	*(i) Diagnosis and Management of common surgical disorders according to Ayurvedic principles;* *(ii) intern shall be involved in Pre-operative and Post-operative managements;* *(iii)surgical procedures in Ear, Nose, Throat, Dental problems, Ophthalmic problems;* *(iv) examinations of Eye, Ear, Nose, Throat and Refractive Error with the supportive instruments in Out-Patient Department; and* *(v) all kriyakalpas, Nasya, Raktamokshan, Karnapuran, Shirodhara, Putpak, Kawal, Gandush at Out-Patient and In -patient Department level.*	HOD /Faculty
Session-3				
03	**Medico-legal aspects and Ethics** – NCISM regulations (National Commission for Indian System of Medicine (Ethics and Registration) Regulations, 2023).- The inters must be given knowledge of regulations regarding ethics for Rights and privileges of ISM practitioners.	01 hrs	• To understand code of Ethics, Misconduct and punishment, Rights of practitioner. • Through this orientation, interns will evolve into ethically responsible and legally aware Ayurveda physicians, capable of delivering safe, transparent, and patient-centered healthcare in alignment with NCISM regulations and national medico-legal frameworks.	HOD (Agad Tantra/ /Resource person
Session-4				

04	❖ **Knowledge of HIMS (Hospital information Management system):** ❖ Hands on training of interns regarding – registration with generation of unique ID, management of OPD and IPD patients, referral, Prescription writing etc. ❖ The interns must be made familiar with contents, duration and conditions suitable or not suitable for issuing medical certificate with ethical consideration. ❖ Interns must be made familiar with different types of consents related to different clinical scenarios and departments.	1 Hr	• Orientation in HIMS will prepare interns to be digitally literate, patient-safety oriented, and legally compliant practitioners, capable of integrating Ayurveda practice with modern digital health infrastructure. • To be able to improve patient care and organizational efficiency.	Resource person
	❖ **Session-5**			
05	**Drug and Magic remedy Act:** ❖ Medical certificate writing. ❖ Briefing of medico legal aspects of objectionable advertisement.	1 Hr	1. Understanding and act to control advertisement. 2. Prohibit the advertisement for claiming treatment of objectionable conditions 3. Familiar with medical certificate. Interns will emerge as ethically responsible and legally aware practitioners, capable of avoiding misleading drug practices, complying with the Drug & Magic Remedies Act, and issuing medical certificates with legal and professional validity.	Resource person

4th – Day: SRPT, KB & Emergency Preparedness : 07 Hrs				
Sl. No	**Content**	**Hrs**	**Proposed expected outcomes at the end of this Orientation, (*as well as at the end of complete one year internship where an intern should be aware of)***	**Resource person**
	Session-1			
01	**Stree Roga evam Prasuti Tantra (Gynecology and Obstetrics):** ❖ Labour Theater etiquettes ❖ OPD card, ANC card & IPD notes writing ❖ Detailed examination of the concerned system related to chief complaint, Grading, scoring and diagrammatical representation of the symptoms present. ❖ Prescription writing specific to PTSR department ❖ Discharge card writing a) Hands on training of various gynaecological examination and procedures. Writing of birth note and discharge summary.	2 Hrs	*(i) antenatal and post-natal problems and their remedies, antenatal and post-natal care;* *(ii) management of normal and abnormal labours; and* *(iii)minor and major obstetric surgical procedures including Yoni Purna, Yoni Pichu, Uttarbasti etc.* *(iv) all routine works such as case taking, investigations, diagnosis and management of common striroga by Ayurvedic medicine;* *(v) screening of common carcinomatous conditions in women.*	HOD /Faculty

Session-2				
02	**Kaumarbrutya - (Pediatrics):** ❖ Vaccination – Cold chain and record keeping ❖ NICU management and Etiquettes ❖ OPD card & IPD notes writing ❖ Detailed examination of the concerned system related to chief complaint ❖ Anthropometric measurements for growth assessment – e.g. height and weight ❖ Immunization record ❖ Essential elements of prescription as drug form, dosage and frequency are to be written on OPD and IPD case sheets. ❖ Discharge card writing a) Hands on training on prescription writing by giving a certain clinical scenario specific to the department. b) Writing of Patient progress note and discharge summary. c) Demonstration of cold chain maintenance	2 Hrs	*(i) Care of new born along with immunization programme including Svarnaprashana:* *(ii) Important pediatric problems and their Ayurvedic management;* *(iii) panchakarma in children.*	HOD /Faculty/ HOD SRPT /Resource person
Session-3				
03	**Atyayikchkitisa (Emergency or Casualty Management) –** a) Demonstrate common protocol of Casualty section. b) Sensitize internees with emergency medications and common types of emergencies. c) Management protocols and medications related instruments in emergency management.	2 hrs	*The intern shall be practically trained to acquaint with and to make him competent to deal with all emergency conditions and participate actively in casualty section of the hospital in identification of casualty and trauma cases and their first aid treatment and also procedure for referring such cases to the identified hospitals*	HOD Kayachikitra/HOD Shalya Tantra
Session-4				
04	**Know AYUSH Regulatory bodies:** a) Information regarding AYUSH Ministry and its functions. b) Knowledge of different National and State Organizations, State ISM registration councils and other regulatory bodies related to ASU system.	01 Hrs	AYUSH Regulatory bodies such as AYUSH Ministry, NCISM, Concerned State AYUSH Directorate, State ISM Registration councils to be known.	Resource person /Faculty

5th - Day - Public Health, PHC Training & Digital Health -				**07 Hrs**
Sl. No	**Content**	**Hrs**	**Proposed expected outcomes at the end of this Orientation, (*as well as at the end of complete one***	**Resource person**

			year internship where an intern should be aware of)	
Session-1				
01	**Swasthavrutta & Yoga (Lifestyle Management, Public Health and yoga):** Roles and responsibilities in respect to Dietary regimen and Yoga. a) The interns should be given hands on training of diet charts preparation. b) Small group activity can be done for diet chart preparation and yogasana/for different clinical conditions. c) Small Role play/Skit on diurnal and seasonal regimen.	02 hrs	*(i) programme of prevention and control of locally prevalent endemic diseases including nutritional disorders, immunization, management of infectious diseases, etc.;* *(ii) family welfare planning programme;* *(iii) Aahar and Vihar Parikalpana including Dinacharya, Sadvritta (Life style and diet counseling daily seasonal routines); and* *(iv) practice of Ashtang Yoga.*	HOD Swasthvritta /Faculty
Session-2				
02	**Primary Health Care (PHC):** Orientation on The internship training in Primary Health Centre or Community Center or Rural Hospital or District Hospital or Civil Hospital or any Government Hospital of modern medicine or Ayurvedic Hospital or Dispensary - During the six months internship training in Primary Health Centre or Rural Hospital or Community Health Centre or District Hospital or any recognized or approved hospital of Modern Medicine or Ayurvedic Hospital or Dispensary.	01 Hrs	*(A) get acquainted with routine of the Primary Health Centre and maintenance of their records;* *(B) get acquainted with the diseases more prevalent in rural and remote areas and their management;* *(C) involve in teaching of health care methods to rural population and also various immunization programme;* *(D) get acquainted with the routine working of the medical or non-medical staff of Primary Health Centre and be always in contact with the staff in this period;* *(E) get familiarized with the work of maintaining the relevant register like daily patient register, family planning register, surgical register, etc. and take active participation in different Government health schemes or programme;* *(F) participate actively in different National Health Programme implemented by the State Government.*	HOD – Swasthvritta /Faculty
Session-3				
03	**Ayushmaan Bharat Digital Mission (ABDM):** Telemedicine and E-Sanjeevani, Hand on training on HPR portal, Tele-medicine, and e-sanjeevani should be given to interns.	1 hrs	• Familiar with Tele-medicine components of ABDM such a HPR, HFR, ABHA etc. • Universal digital health infrastructure, patient empowerment, better care continuity. • Increased healthcare access, cost-effective delivery, and	Resource Person /Faculty

			stronger rural-urban connectivity.	
Session-4				
04	**Team Building Activities for interns:** a) The intern coordinator/intern In-charge/ Resource person will divide the interns in different batches of appropriate size for effective participation of all interns and conduct the team building activity. b) The planning of the activity can be done one day before for better outcome. ❖ Team building activities for inters must aim to enhance teamwork, communication, and morale within their group, ultimately boosting overall performance and fostering a more positive work environment.	01 hrs	• Team building activities, group energy realization. • Interns will emerge as ethically responsible and legally aware practitioners, capable of avoiding misleading drug practices, complying with the Drug & Magic Remedies Act, and issuing medical certificates with legal and professional validity.	Resource Person /Faculty
Session-5				
	Medical value travel and AYUSH VISA: ❖ **Introduction to Heal by India and Heal in India.**	01 hrs	• Know opportunities to treat foreign nationals within the country and outside the country. • Broaden your perspective on healthcare delivery beyond India. • Equip you with skills to participate in India's global health mission. • Empower you to be an ambassador of Ayurveda and Indian wellness traditions worldwide.	Resource person /Faculty
Session-6				
	Orientation to E-Logbook & sensitization on mandatory online National programme as prescribed by NCISM. ❖ Introduction to NCISM-mandated electronic logbook system. ❖ Structure of the logbook: case records, procedures (Observed/Assisted/Performed), reflections. ❖ Integration with HIMS and biometric attendance. ❖ Rules for verification and certification by HOD/Consultant. ❖ Penalties for incomplete or non-certified logbook. ❖ Demo session: how to make daily entries.	1 hrs	• Interns will learn the importance of systematic documentation. • Ability to use the digital logbook efficiently. • Awareness of how e-logbook contributes to evaluation, a. • To know the required marks information for completion and online National programme as prescribed by NCISM.	Intern Coordinator / IT Support / HSET Expert

6th - Day: Research, Career Pathways & Valedictory - 07 Hrs				
Sl. No	**Content**	**Hrs**	**Proposed expected outcomes at the end of this Orientation, (*as well as at***	**Resource person**

			the end of complete one year internship where an intern should be aware of)	
Session-1				
01	**Entrepreneurial opportunities in AYUSH:** ❖ Job or other career opportunities after Graduation. ❖ Knowledge of different prospective fields available for AYUSH interns after completion of degree. ❖ Brief of MSME schemes.	02 Hrs	• To have insights of start-ups and Capacity building in Entrepreneurship activity. • Feel empowered to start their own ventures. • Recognize their role in public health and wellness innovation. • Be ready to explore non-traditional, impactful career paths.	Resource person/EDC cell Head
Session-2				
02	**Scientific presentation skills:** ❖ Case series presentation ❖ Research aptitude & introduction to clinical audits ❖ Orientation on publication skills ❖ Research and Review article presentation	02 hr	• One should be able to publish papers in indexed, UGC and Scopus Journals. • This orientation enables BAMS interns to: Present Ayurveda with scientific rigor. • Gain confidence in academic forums; • Bridge traditional knowledge with modern communication standards.	Resource person/ HSET Expert
Session-3				
03	**National Examinations:** Information about (National Commission for Indian System of Medicine (National Examinations for Indian System of Medicine) Regulations, 2023). The interns should be accustomed with the exam regulation of NCISM for different exams like NEXT, NTET etc.	01 Hr	• Know rules and regulations of NTET and NExT. • This orientation empowers BAMS interns to stay ahead of regulatory changes. • Build strong foundations for PG, teaching, or practice align with NCISM's vision of modern, competent Ayurveda professionals.	Resource person /Faculty/DMS
Session-4				
04	❖ **Post Test** a) Post-test to be conducted before Valedictory function. b) Pre-Test & Post-Test shall be from the same questionnaire. c) Post-test and Feedback shall be taken at the end of the Internship Orientation program. d) Results of the pre-test and post-test are to be compared. Post-test results must indicate that students achieved the course outcomes. If any aspects are not improved or understood by many students, such aspects need to be addressed. e) Feedback is to be obtained on the content of the	02 Hr	• Good knowledge retention of college/hospitals policies, procedures. • Awareness of Intenship expectations, such as conduct, communication, and responsibilities. • Readiness to begin tasks with confidence and minimal supervision. • Identification of knowledge gaps • Feedback to improve future	Intern Coordinator /DMS

	Internship Orientation program as well as the mode of conduction and Suggestions for further improvisation. f) Interaction with Heads of Departments: Q&A session		orientation programs.	
	❖ **Valedictory and Feed back**	-	--	Principal/Dean/DMS /Intern coordinator /HOD/Any others

Note: -

1. The intern orientation programme must be conducted after the completion of final year/3rd Prof. examination and before the starting of the internship, preferably immediately after the last practical exam (Viva - voce) so that all the students are easily available for the orientation programme.
2. ID card must be issued to all interns before the commencement of the internship.
3. Biometric attendance of all the interns must be made mandatory during the duration of internship.
4. According to the convenience, timing and availability of resource person the college may shuffle the sessions and prepare schedule for 6 days internship orientation programme.